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ANALYSIS OF MULTIPLE-USER  
POLLER-SENSOR MULTIPLEX LINK

22 JUNE 1979

Contract No. N62269-77-C-0506

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Prepared for:

J. O'Donnell, Code <sup>5021</sup>~~5510~~  
NAVAL AIR DEVELOPMENT CENTER  
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ANALYSIS OF A MULTIPLE-USER POLLER-SENSOR  
MULTIPLEX LINK

Contract No. N62269-77-C-0506

Prepared for: 5021

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## SECTION 1

### INTRODUCTION

SEMCOR, Inc. is under contract to the Naval Air Development Center (contract N62269-77-C-0506, dated 30 September 1977) to provide a computer analysis of a multiplex link. This report documents this analysis and is intended to fulfill the requirements of data item A002, the Engineering Report.

SEMCOR has developed and modified a computer model of the multiplex link, has exercised it, and has analyzed the results. Section 2 of this report describes the computer model. Section 3 discusses the results of running the model, and Section 4 presents conclusions.

In running the model, SEMCOR investigated the effects of varying the link transmission speed, number of sensors, sensor buffer length, time between updates of sensor buffer (called sensor period in this report), sensor intelligence, and probability of the sensor having useful data (only applicable to intelligent sensors; called probability of detection in this report). Sensors were turned on simultaneously and at even intervals to see if the turn on strategy had a significant effect on link performance. Three polling strategies (linear, group, and sensor contention) were considered. The effectiveness of the link was measured by observing the percentage of data dropped.

This study concludes that intelligent sensors provide the most effective method of improving link performance. If dumb sensors are to be used, group polling provides some improvement over linear polling. Sensor contention polling, given the constraints of the link, is less effective than linear polling. Sensor contention polling is therefore not recommended.

One combination of sensor buffer length, sensor period, and link speed was completely unworkable. With a 10,240-bit buffer, 30-second period, and 300 bps transmission rate, no messages ever make it over the link.

## SECTION 2

### PROGRAM DESCRIPTION

The link model is an event-oriented, Monte-Carlo, FORTRAN computer program, intended to be run on a time-shared terminal. The program asks the user for all required input data and then outputs summary data to the terminal. A random number generator is called to determine the outcome of any random events.

To make modifications or expansion possible, the model is made of several modules, each responsible for a specific function. These modules are described in paragraph 2.5.

#### 2.1 GENERAL DESCRIPTION

The program is intended to model the operation of a multiplex link between up to 120 sensors at one end and single poller at the other. The poller and sensors, however, are not the sole users of the link. A competitor takes the link away at random intervals. If the competitor takes the link away at a critical time, if it keeps the link busy for too long, or if the link is overloaded by the sensors, some of the sensor data will be lost. The primary measure of effectiveness tabulated by the model is the percentage of sensor data lost.

The program is event-oriented. That is, instead of looking at the state of the simulation at fixed time intervals regardless of whether a critical event is occurring, this program determines when critical events occur, specifies which event is next, and then processes that event. The program is also a Monte-Carlo simulation. Because of the random number generator, two identical runs will generally yield different results. This variation can give the operator a feel for the range of results he might encounter in the actual operation of the system.

### 2.1.1 The Multiplex Link

Figure 2-1 shows the timing and logic of the link. Starting from the idle state (A), the link controller issues a net control transmission (NCT) and waits for all link users to receive it (PD) and for a high-priority user to request it (PR). The user competing with the link can be a high-priority user and take the link at this time. If this occurs, the link goes through the competitor's cycle (B), and returns to the idle state (A). If not, the link controller waits for any user to request the link. Twenty time slots, called general access time slots, are provided to allow the users to request the link. If it requires the link, the user transmits a request during one of these time slots. The user picks a time slot at random. The poller and the competitor may both come up in these time slots, and whichever one happens to pick an earlier time slot will get the link. There will never be a situation in which neither gets the link, because the poller will always request it.

If the competitor gets the link, the link goes through the competitor's cycle (B) and returns to the idle state (A). If not, the controller issues a transmission indicating that the poller and sensors have the link (E), waits for everyone to get it (PD), and gives a high-priority competitor one last chance to preempt the poller and sensors (PR). If the competitor elects to take the link, the link goes through the competitor's cycle (B) and returns to the idle state (A). If this does not occur the sensors and their poller can use the link for one message period (MSG) of 30 seconds without interference. After the message period, the link returns to point E, where an NCT indicates that the poller and sensors still want the link. Before the next message period can start, however, there will be a PR to allow a high-priority user to gain control of the link.

Between the idle state (A) and the sensors' mode (E), there are three decision points which must be passed. The outcome of these decisions is random. The probability that the link will pass directly from the idle state (A) to the sensors' mode (E) without the competitor gaining control of the link is 0.5.

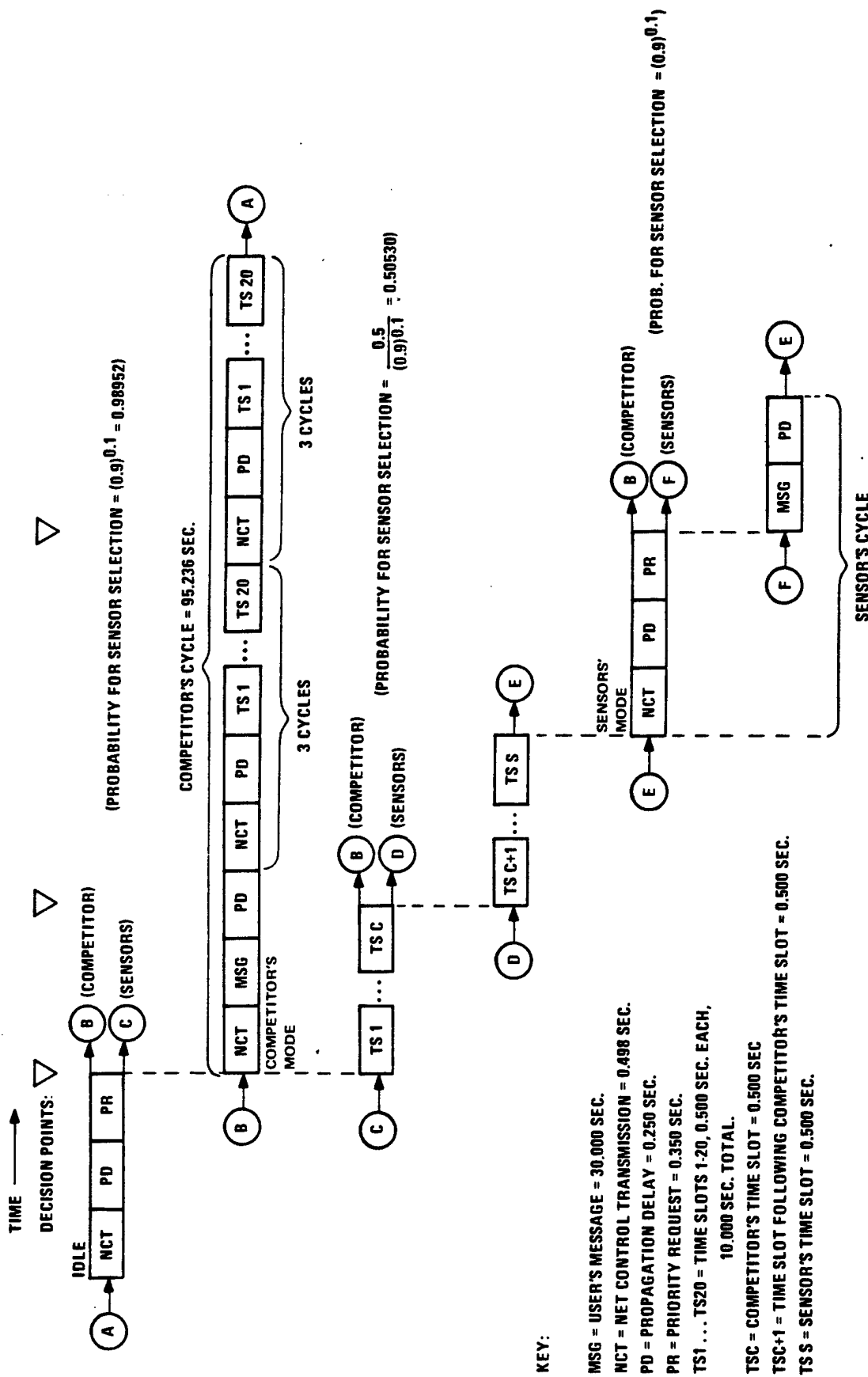


Figure 2-1. Link Model Used for Simulation Program

Once in the sensors' mode (E), the probability that the link will stay in that mode (that is, will not be preempted in the PR) for ten message cycles is 0.9.

These requirements are met if the probability of the sensors making it through any PR (that is, not being preempted by the competitor) is 0.9895 and if the probability of the sensors' being selected in the general access time slots is 0.5053. The derivation of these probabilities is discussed in paragraph 2.5.

#### 2.1.2 The Poller and Sensors

Once the poller and sensors have the link, they are free to use it in any manner. There are no protocol or data format requirements imposed by the link controller during the message period. This allows a wide variety of polling schemes, data rates, and degrees of sensor or poller intelligence.

The sensors accumulate data continuously, until they fill a data buffer. Once this buffer is filled, it is dumped to a transmit buffer. Whenever the poller interrogates the sensor, the sensor transmits the contents of the transmit buffer. The time between two updates of the transmit buffer is called the sensor period. If the sensor is not interrogated once each period, data will be lost when the new data overwrite the old data in the transmit buffer.

The poller knows when the sensors will update their buffers. The sensors may update their buffers at different times, but the length of the period for all sensors is the same. The poller will generally interrogate the sensors in the order in which they will lose data. That is, the sensor which is going to lose data the soonest will be polled first.

#### 2.1.3 Polling Strategies and Sensor Intelligence

Three major polling strategies were examined in this study: linear polling, group polling, and sensor contention. In a linear polling scheme, a poll is sent to a particular sensor, which responds by transmitting the contents of its buffer. The next sensor is then polled and responds; this continues until the entire field



has been polled. Figure 2-2 shows the timing diagram of this type of polling scheme. The offset between the time a message is sent and the time it is received is to allow for propagation delay (PD) between the poller and the sensors. The poller starts sending the next poll before the previous reply is completed, saving one propagation delay per poll reply cycle. The sensors do not need to overlap polls and replies. TMSG refers to the 30-second message time of Figure 2-1. The cycle time in the upper right corner refers to the time required for one poll/reply cycle. The poller does not send a poll if there is not enough time to complete this cycle.

If the sensor is "dumb," it will always send the entire contents of its transmit buffer. If the sensor is "intelligent," it will analyze the data it received to determine whether the data are useful. If the data are useful, they will be sent. If not, a much shorter message, telling the poller that no useful data are present, will be sent. This relieves the poller of some of the processing burden. More important, if a linear polling scheme is being used, the poller can send the next poll sooner so more sensors can be interrogated in the 30-second message interval.

The second polling scheme examined by this study is group polling. The poller sends a poll to a group of sensors, which send their messages one after another. The most efficient group polling scheme would be for the poller to send one poll at the start of the message period, addressing enough sensors to fill the remaining time with replies. This is the scheme that was chosen for this study to maximize the difference between linear and group polling schemes. A timing diagram of this scheme is presented in Figure 2-3. Note that an intelligent sensor does not speed responses in this scheme; since the sensors listen only to the poller and not to other sensors, they cannot tell whether the sensors before them transmitted data or not. The sensors must wait the worst-case length of time before they transmit, assuming that all sensors before them transmitted a full buffer of data.

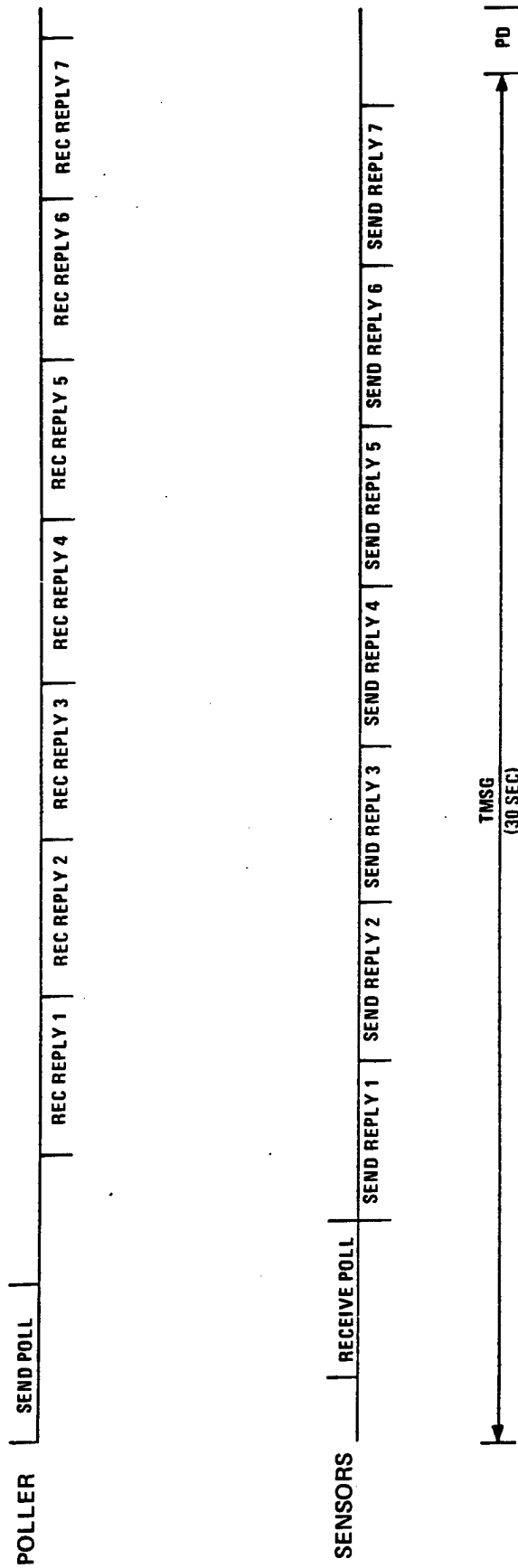


Figure 2-2. Linear Poller Timing Diagram

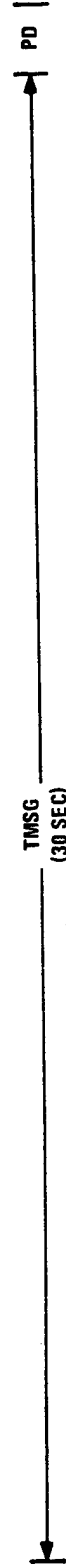
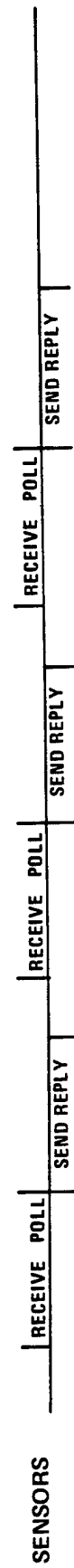
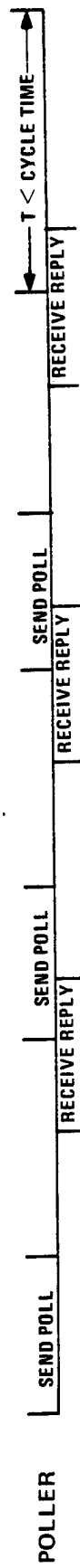


Figure 2-3. Group Poller Timing Diagram

The last scheme, sensor contention, assumes that the sensors are all intelligent. The poller sends out a request for status, then waits a set period of time for replies. This reply period consists of several time slots, called sensor answer slots. If a sensor has data to report, it comes up at random in one of these time slots. There must be enough slots so that the probability of conflicts (two or more sensors coming up in the same time slot) is fairly low. This probability will be a function of the product of the number of answer slots, the probability of the sensors having data to transmit, and the number of sensors.

Once any sensor with data have come up in the answer slots, the poller sends out a poll requesting those sensors to transmit. If two sensors come up in the same slot, both are ignored, and will not be polled. They will try again in the next set of answer slots. If the sensors have a low probability of having data, a few answer slots can serve many sensors; this saves a considerable amount of time.

## 2.2 PROGRAM INPUTS AND OUTPUTS

There are three kinds of inputs to the program. First, there are the implicit inputs which were set up when the program was written and are never changed; these are the link parameters. Second, there are the parameters to which the program is providing data to analyze. These parameters must be input each run. Third, there are variables and logic which determine the particular strategy being used. These strategic inputs are set up in the program and then used for several runs.

### 2.2.1 Implicit Inputs

The parameters which remain constant over all runs include the following:

- Probability of getting through a priority request without being preempted (0.98952)
- Probability of the link successfully getting through the general access time slots (0.5053)

- Competitor's cycling time (95.236 sec)
- Propagation delay (0.250 sec)
- Time required for a priority request (0.350 sec)
- Time required for a net control transmission (0.498 sec)
- Time allowed for user's message (30.0 sec)
- Sensor reply time slot length (sensor contention only) (0.500 sec)

These apply to the model presented in Figure 2-1.

### 2.2.2 Explicit Inputs

The explicit inputs, which are entered at the start of each run, include the following:

- Run identification number (an arbitrary number, used to identify a given run)
- Number of sensors
- Sensor data period
- Transmission rate
- Length of sensor message (number of bits in sensor transmit buffer)
- Number of bits in a poll
- Length of simulation (simulated time in hours)
- Probability of target (intelligent sensors only)
- Number of reply slots (sensor contention only)

### 2.2.3 Strategic Inputs

These inputs are not inputs in the same sense as the implicit and explicit inputs. The strategic inputs are implied in various logical modules within the program. There are three strategic inputs, which can be run in various combinations. The three inputs are polling strategy, sensor intelligence, sensor and turn-on. The three polling strategies, linear polling, group polling, and sensor contention, have already been discussed. The sensor intelligence possibilities have also been discussed. Any polling strategy may be used with either dumb or intelligent sensors, except for sensor contention which requires

intelligent sensors. The combination of group polling and intelligent sensors, while possible, will not provide any advantages over dumb sensors, as discussed in paragraph 2.1.3.

The third strategic input, sensor turn-on, has not yet been discussed. If the sensors are all turned on at the same time, they will all update their buffers at the same time. If the link is taken away by the competitor at an inopportune time, the data from all sensors in the field may be lost. If the sensors are turned on at even intervals over a time equal to one sensor period, then the loss of the link at any time will be more likely to cause the loss of some data but less likely to cause the loss of data from all the sensors. There are many other possibilities for sensor turn on, just as there were many possible polling strategies. However, simultaneous and even-interval turn ons are representative of the available options, therefore, they were the only ones considered.

The logic used to implement the strategic inputs is discussed in paragraph 2.5.

#### 2.2.4 Outputs

The program basically provides a summary of the amount of sensor data which are sent over the link and the percentage which are lost. The printout is on 8-1/2 in x 11 in sheets, with up to 30 sensors per sheet. Explicit inputs are summarized in the printout. Strategic inputs are output as part of an alphanumeric message which is modified manually whenever strategies are changed. Implicit inputs are not printed. The time and date of the run is also printed so that runs can be distinguished, even if they are inadvertently given the same run number. A sample output is shown in Figure 2-4.

### 2.3 PROGRAM ORGANIZATION

The program is organized as a set of seven subroutines, which are responsible for handling most program functions, and a short (less than 20 statements) executive routine which calls the subroutines (see Figure 2-5.)

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	1	22	4.5455
2	20	1	21	4.7619
3	21	1	22	4.5455
4	20	1	21	4.7619
5	20	0	20	0.0000
6	22	1	23	4.3478
7	21	1	22	4.5455
8	19	1	20	5.0000
9	18	1	19	5.2632
10	21	1	22	4.5455
11	19	1	20	5.0000
12	18	1	19	5.2632
13	19	1	20	5.0000
14	20	1	21	4.7619
15	19	1	20	5.0000
16	21	1	22	4.5455
17	17	1	18	5.5556
18	18	1	19	5.2632
19	18	1	19	5.2632
20	22	1	23	4.3478
21	20	0	20	0.0000
22	18	2	20	10.0000
23	21	2	23	8.6957
24	18	2	20	10.0000
25	19	2	21	9.5238
26	17	2	19	10.5263
27	19	1	20	5.0000
28	19	2	21	9.5238
29	20	2	22	9.0909
30	18	1	19	5.2632
TOTAL	583	35	618	5.6634

Figure 2-4. Sample Program Output

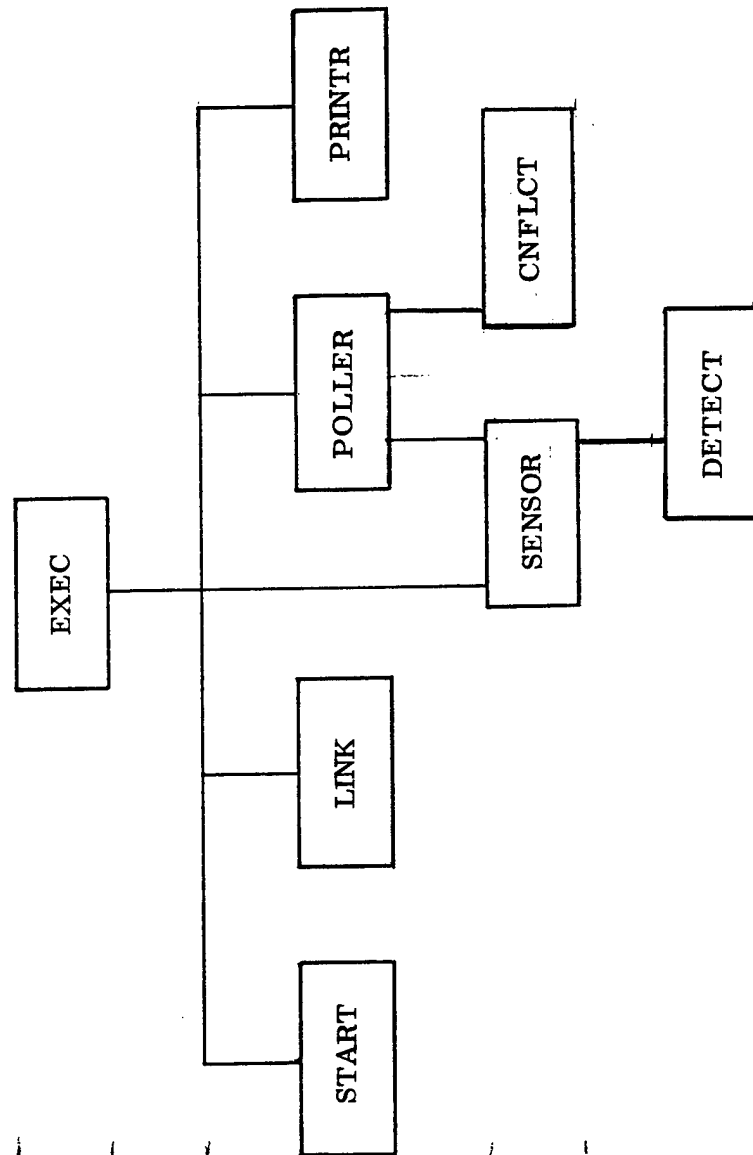


Figure 2-5. Program Organization



The seven subroutines are as follows:

- START
- LINK
- DETECT
- CNFLCT
- SENSOR
- POLLER
- PRINTR

The START subroutine is called from the executive as the first subroutine on each run. It prompts the operator to enter the explicit inputs, clears all the accumulating variables, initializes status variables, and sets up operating parameters.

The LINK subroutine simulates the random availability of the data link. Its only inputs are its previous state and the current time. Its only outputs are the link availability (either available or not) and the next time the LINK routine must be called.

The DETECT subroutine is only used when intelligent sensors are modelled. It calls a random number generator to determine whether or not a detection has occurred. It keeps track of the status of each sensor so that a given sensor will give the same response throughout a given period, regardless of how often DETECT is called.

The CNFLCT subroutine simulates the sensors answering in random answer slots in the sensor contention mode. If two sensors come up in the same slot, CNFLCT sets flags to prevent these sensors from being polled.

The SENSOR subroutine keeps track of the times when the sensors will have data ready and the times when data will be dropped. Its primary function is bookkeeping; it increments counters whenever messages are picked up or dropped. Its only other output to the rest of the program occurs the next time

a message is dropped. This allows the executive routine to determine when SENSOR must be called to drop messages. If the sensors are intelligent, SENSOR will call DETECT to determine if the sensor has useful data.

The POLLER routine is called from the executive whenever the link is available. POLLER then will assume the duties of the executive until the link is no longer available. During this period, POLLER will call SENSOR to transmit or to drop messages and will keep track of current time. The calls to SENSOR to pick up messages will be performed according to the predefined strategic inputs. It will also call DETECT to determine whether an intelligent sensor has useful data, and CNFLCT to determine if any sensors conflict in the answer slots in the sensor contention mode.

The PRINTR routine simply arranges the data in a convenient format and outputs it to the terminal. Its printouts are in an 8 1/2 in X 11 in format, and it can handle up to 30 sensors per page. The printout will be up to four pages long to handle up to 120 sensors.

The executive routine, EXEC, is the simplest routine in the program. Initially, it calls START. It then starts the program execution loop. In this loop it determines which of the critical events will occur next: either a sensor will drop data or the link will change state. Depending on the outcome of this determination, it calls either SENSOR or LINK. Next, it will call POLLER, if the link is available. It will then return to the top of the loop and repeat. Once the end of the simulation is reached, it calls PRINTR, then repeats the whole process by calling START again.

## 2.4 PROGRAM LOGIC

This section will describe the eight modules (seven subroutines and main program) which constitute the program.

### 2.4.1 Executive Routine (EXEC)

EXEC is the main program. It keeps track of simulated time (which runs much faster than real time) and calls various subroutines as necessary. Figure 2-6 shows the flow chart of EXEC.

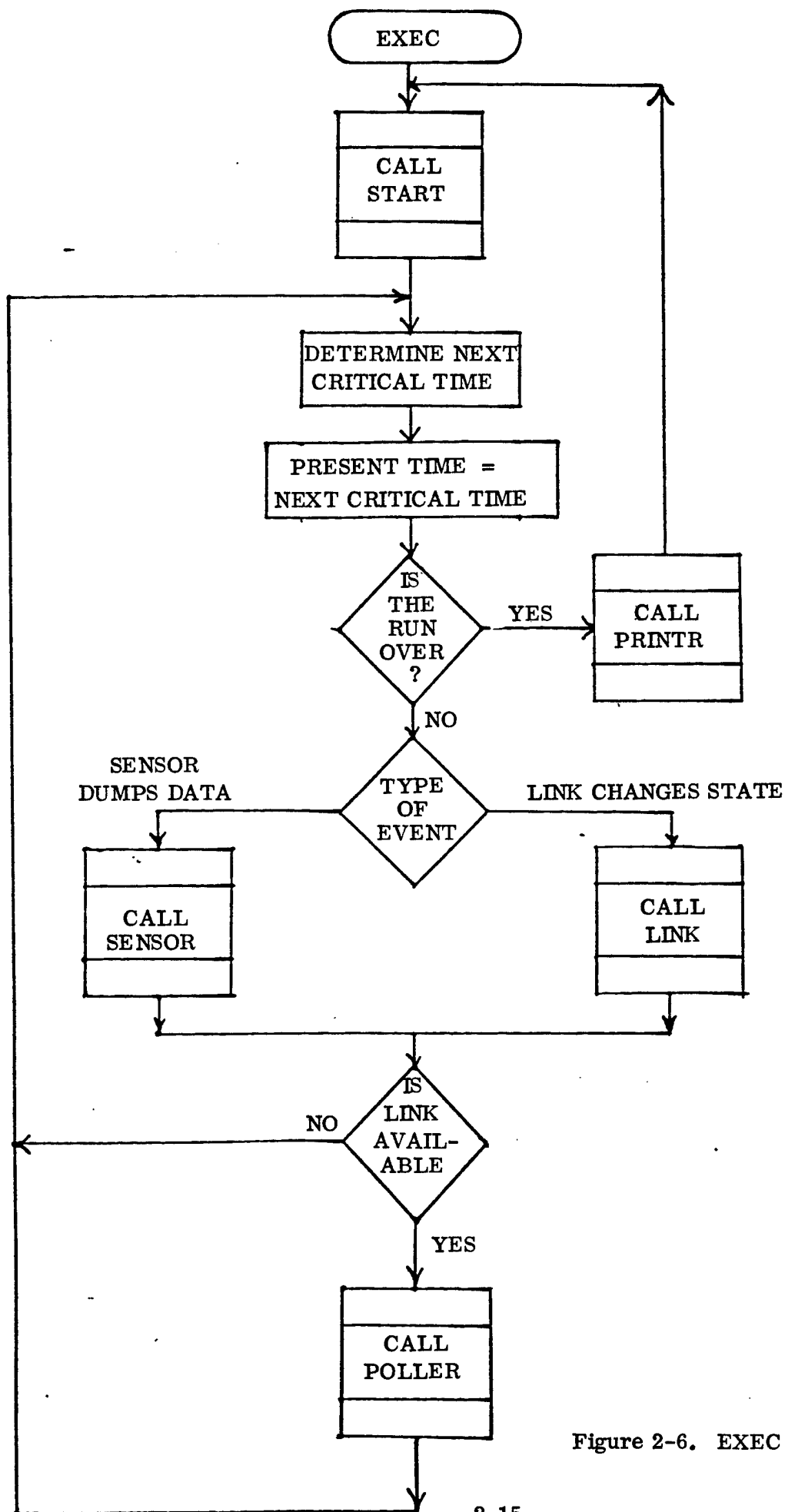


Figure 2-6. EXEC Flow Chart

EXEC initially calls START to initialize the run. START's operation is summarized in paragraph 2.5.2. EXEC then determines when the next critical simulation event will occur and moves the simulation time up to that event. The event can be the link changing state or a sensor losing data. The START routine will have set up the variables so that EXEC will initially determine that the LINK subroutine must be called, to specify when the link will become available. Assume that the link is in the idle state at the start of the simulation.

In general, EXEC will call either SENSOR to drop data or LINK to change the link's status from available to not available or vice versa.

Once the critical event has been processed, EXEC checks the availability of the link. If the link is available, EXEC calls POLLER, which simulates the conversation over the link between the sensors and the poller. POLLER will take over the timekeeping functions as long as the link is available. When the link is no longer available, POLLER will return to EXEC.

When EXEC determines that the run is over (that is, the next critical event occurs past the end time input to the user), it calls PRINTR to output summary data, then calls START again to see if another run is to be made.

#### 2.4.2 Initialization Subroutine (START)

START is a fairly straightforward subroutine (see Figure 2-7). It initially reads in a run number from the terminal. A run number equal to zero is the signal that no more runs are desired, and the program terminates.

If the run number is not zero, the user is prompted for the explicit inputs. The START subroutine then clears accumulating variables, such as message counters, initializes status variables, such as simulation time and link availability, and sets up the initial critical event times. The initial critical sensor time will always be set to a value greater than zero, and the initial critical link time will be set to zero. This ensures that EXEC will determine that the first critical event is a change in link status and will call LINK first.

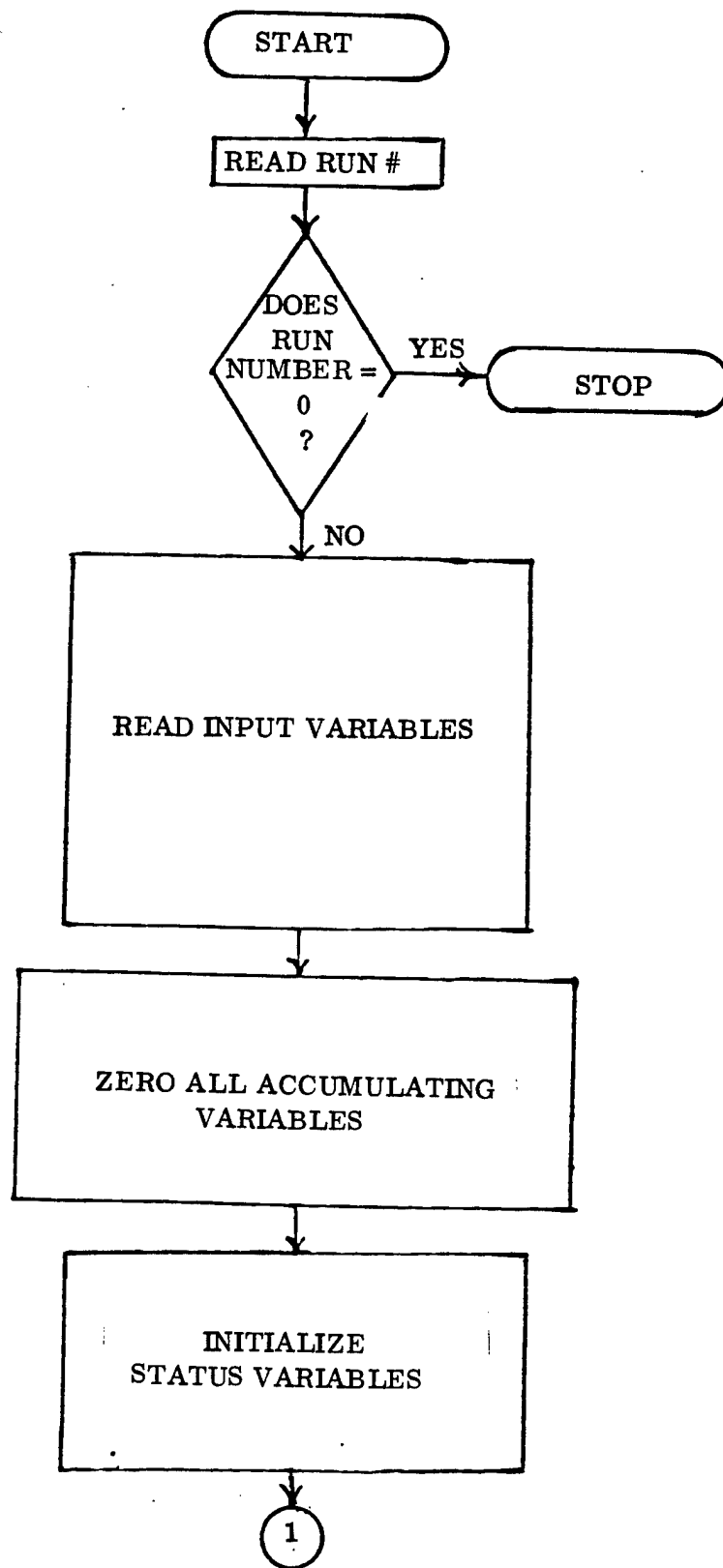


Figure 2-7. START Flow Chart

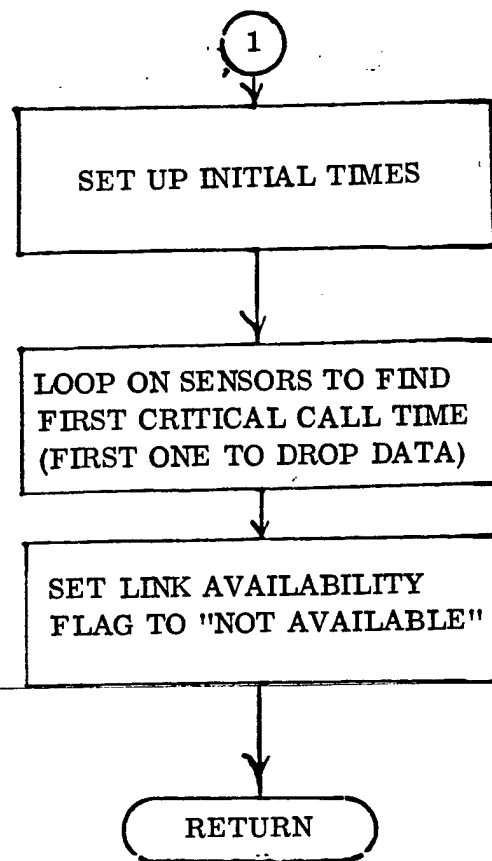


Figure 2-7. START Flow Chart (Continued)

#### 2.4.3 Link Simulation Subroutine (LINK)

The LINK subroutine (see Figure 2-8) controls the availability of the link for the use of the sensors. It outputs only two variables: the link available flag (yes or no) and link critical time (when LINK will next change state). This subroutine has three possible internal states: idle, message starting (just after priority request), and message over. The initial state is idle and is set up by START. Subsequent states are determined by LINK itself. When LINK is called the first time at Time = 0.0 hr, it runs through a set of decisions just as the actual link would (see Figure 2-1). The outcome of the decisions, however, is based on a random variable rather than on actual requests from a competing user. After some number of decisions, it is determined that the link will become available at a certain time in the future. Since the link will not be available until then, the link-available flag is set to "not available." The time when the link will become available is output as the next critical link time, so that EXEC will know when to call LINK again.

When EXEC calls LINK again at the appropriate time, LINK will simply set the link-available flag to "available" and set the next critical time to present time plus 30 seconds. This means that the poller and sensors can use the link for 30 seconds.

Thirty seconds later, LINK will be called again. The link will be at the point in time at which a message has just been completed. At this point, the random variable is examined to see if the competitor will preempt the sensors. The logic is very similar to the initial idle state logic, and in fact much of the logic is shared between these two functions. At the end of the loop, which is traversed a random number of times, it will have been determined when the link becomes available. The link-availability flag is set to "not available" until that time, when EXEC calls LINK again.

From this point to the end of the simulation, the link alternates between these two states, the first at the beginning of a message period, the second at

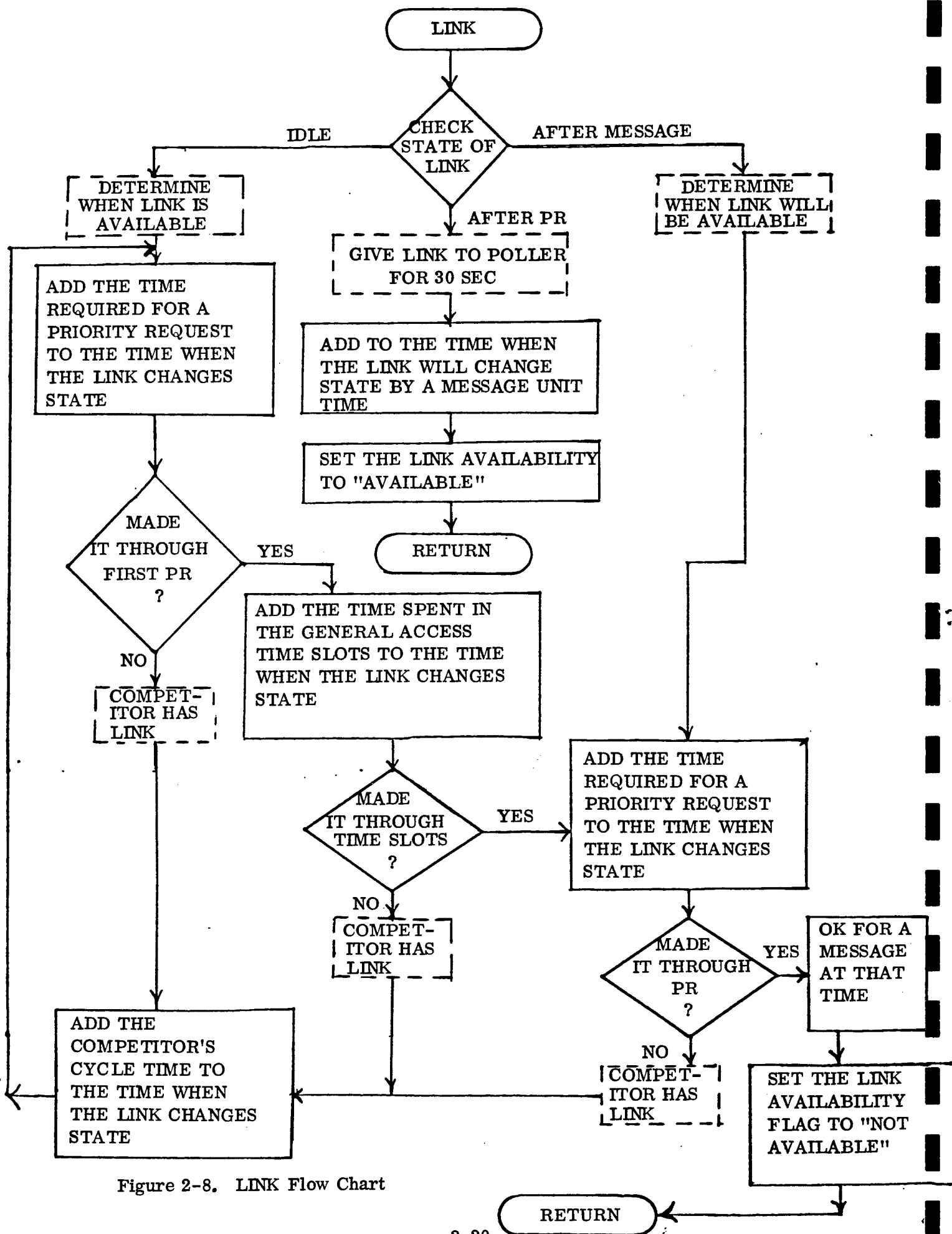


Figure 2-8. LINK Flow Chart



the end. Each time LINK is called, therefore, the link-availability flag changes state, and the time of the next state change is output for EXEC.

The probabilities associated with the decision points are based on two assumptions. The first assumption is that, once the link becomes available, the probability that it will be available for at least ten message cycles is 90 percent. This means that the probability that the competitor will take the link away during any given priority request interval,  $P_{pr}$ , must be  $(0.9)^{0.1}$ , or about 0.9895. The second assumption is that the probability of going from the idle mode to the sensors' mode without the competitor getting the link is 50 percent. In order to get from the idle mode to the sensors' mode, two decision points are passed: a priority request and a set of general access time slots. The probability of making the transition without interruption is therefore

$$P_{tis} = (P_{pr}) \cdot (P_{ts}), \text{ or } P_{ts} = \frac{P_{tis}}{P_{pr}}$$

where

$P_{tis}$  = Probability of transition from idle to sensors' mode

$P_{pr}$  = Probability of getting through priority request

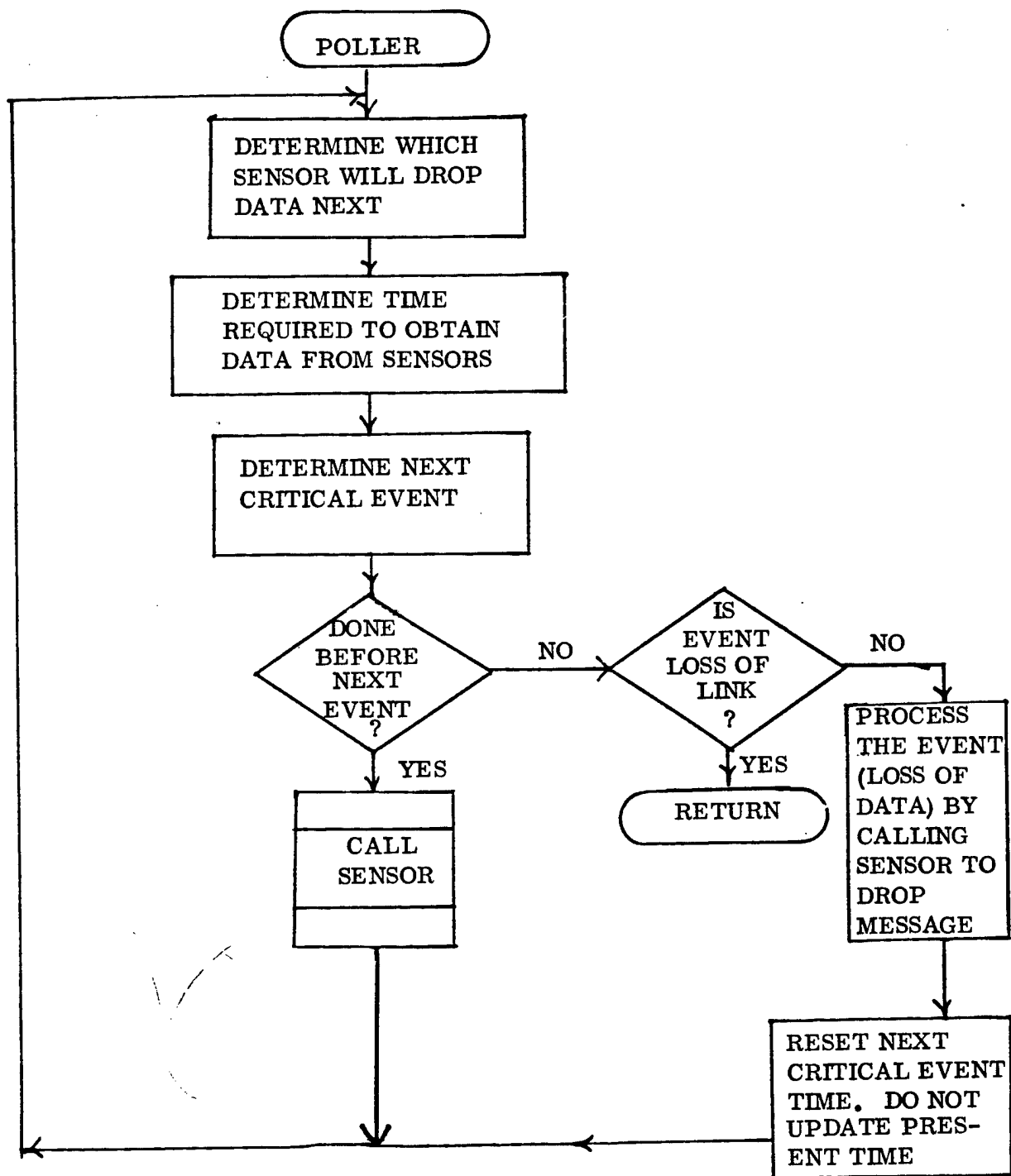
$P_{ts}$  = Probability of getting through time slots

$P_{tis}$  is given as 0.5, and  $P_{pr}$  is known from the first assumption to be 0.9895. Thus,

$$P_{ts} = \frac{P_{tis}}{P_{pr}} = \frac{0.5}{0.9895} = 0.5053$$

#### 2.4.4 Polling Subroutine (POLLER)

POLLER is a comparatively simple routine (see Figure 2-9). It checks to see which sensor will drop data next, then calls SENSOR to get a message from that sensor. It then adds the polling and reply time to the current time. Since it does advance the simulation time, however, POLLER must perform the same checks performed by EXEC regarding link availability and dropped messages.



NOTE: Simulation clock is incremented by poller in different ways depending on polling strategy. See text for explanation.

Figure 2-9. POLLER Flow Chart

POLLER retains control until the link is no longer available, at which time it returns to EXEC. If a sensor should come to the point at which a message must be dropped, POLLER will call SENSOR to drop the message, just as EXEC would do.

Implementing different strategies is primarily a matter of juggling times around. For example, in the linear polling scheme with dumb sensors, the same cycle time is required every time a sensor is polled. This cycle time consists of one polling time, one propagation delay, and one reply time.

If the sensors are intelligent, the cycle time depends on whether the sensor being polled has data or not. POLLER calls the DETECT subroutine to determine whether or not the sensor has data.

In a group polling scheme, an initial poll is sent out, and many replies come back. This is simulated by advancing the clock initially by one poll time and one propagation delay, and then by one reply time for each responding sensor.

In a sensor contention scheme, an initial poll is sent; there is a series of answer slots; a second poll is sent, then a number of replies. This is simulated by advancing the clock initially by one poll time, one propagation delay, the time required by the answer slots, and a second propagation delay. DETECT and CNFLCT are called to determine which sensors should be polled. Any sensor that has data (determined by calling DETECT) will be called, provided it does not conflict with another sensor trying to come up in the same answer slot (determined by calling CNFLCT).

#### 2.4.5 Sensor Bookkeeping Subroutine (SENSOR)

The SENSOR routine (see Figure 2-10) has two basic functions. The first is to keep the minimum and maximum call times current. The minimum call time is the time when a message will be ready; an earlier call will not produce new data. The maximum call time is the time when a sensor will drop a message if it is not polled. (The critical sensor time is defined as the earliest

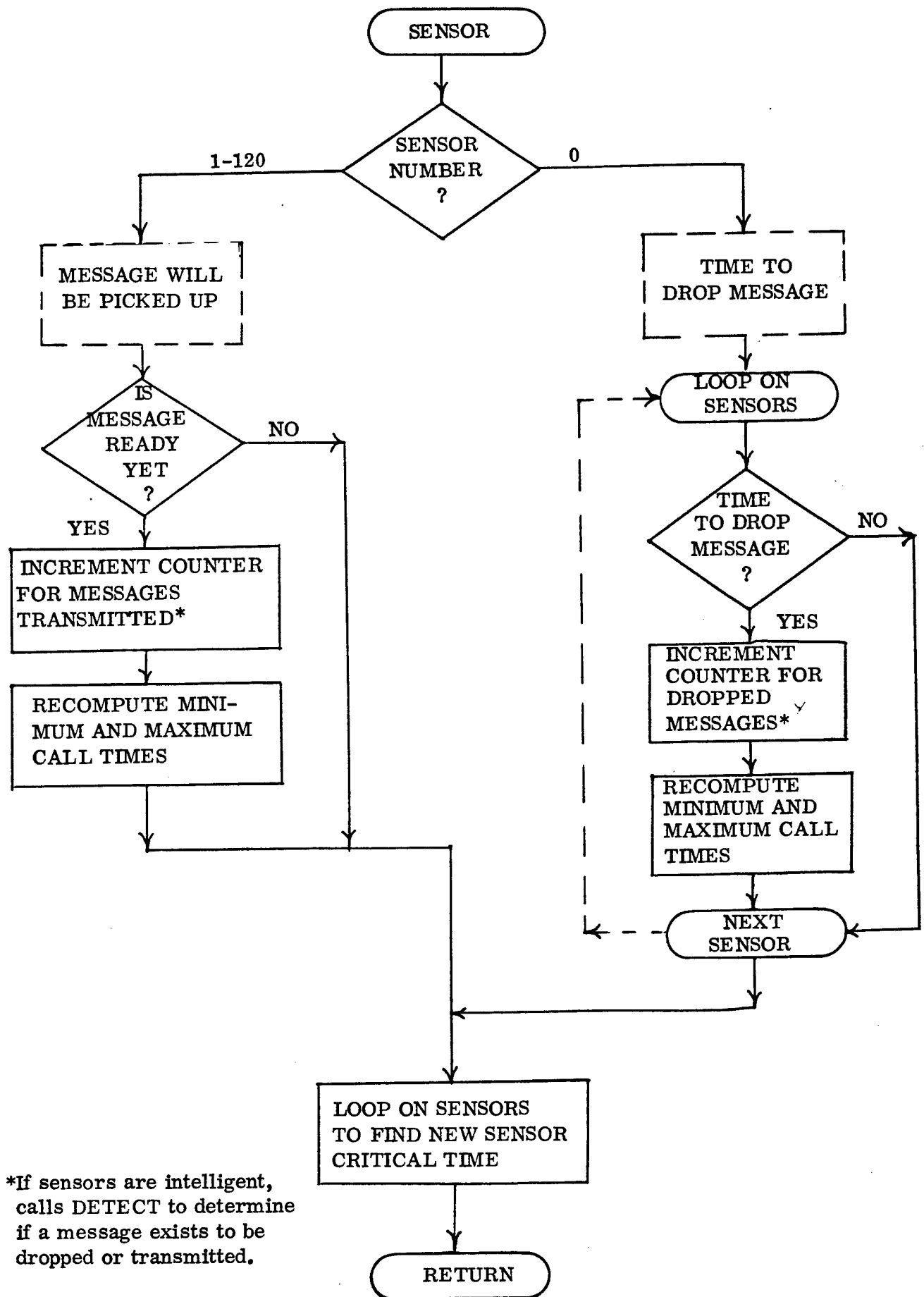


Figure 2-10. SENSOR Flow Chart

maximum call time.) The second basic function of the SENSOR routine is to keep track of messages dropped and sent. When EXEC or POLLER calls SENSOR to drop messages, SENSOR loops through the sensors and dumps messages of any sensors whose maximum call times equal the current simulation time. To "drop" a message, a counter for dropped messages is added. There is a separate counter for each sensor. When POLLER calls SENSOR to send a message, POLLER will specify which sensor it needs. If that sensor has a message ready, a message will be "sent" by adding a counter for sent messages. If the sensor does not have a message ready, the message will not be sent. In this latter case, no counter is affected. Whenever a message is sent or dropped, the minimum and maximum call times are incremented by the sensor's update period.

Before SENSOR returns, it loops through all the sensors to find the earliest maximum call time, which becomes the new critical sensor time for EXEC and POLLER.

#### 2.4.6 Intelligent Sensor Detection Subroutine (DETECT)

DETECT is called whenever SENSOR or POLLER need to know whether a particular sensor has data or not. DETECT does not return the answer directly. Instead, it makes sure that a set of flags indicating the status of all sensors is current (see Figure 2-11).

DETECT maintains a set of flags, one for each sensor, to indicate which sensors have data to transmit and which do not. DETECT also maintains a set of update times, one per sensor, to indicate the next time that each flag should be updated. This variable is initially set to the minimum call time for each sensor and advanced by the time of one sensor period each time the data flag is updated.

When DETECT is called, it enters a loop to examine the update times and data status for each sensor. It compares the update time to the present simulation time. If the present time is greater than or equal to the update time, then

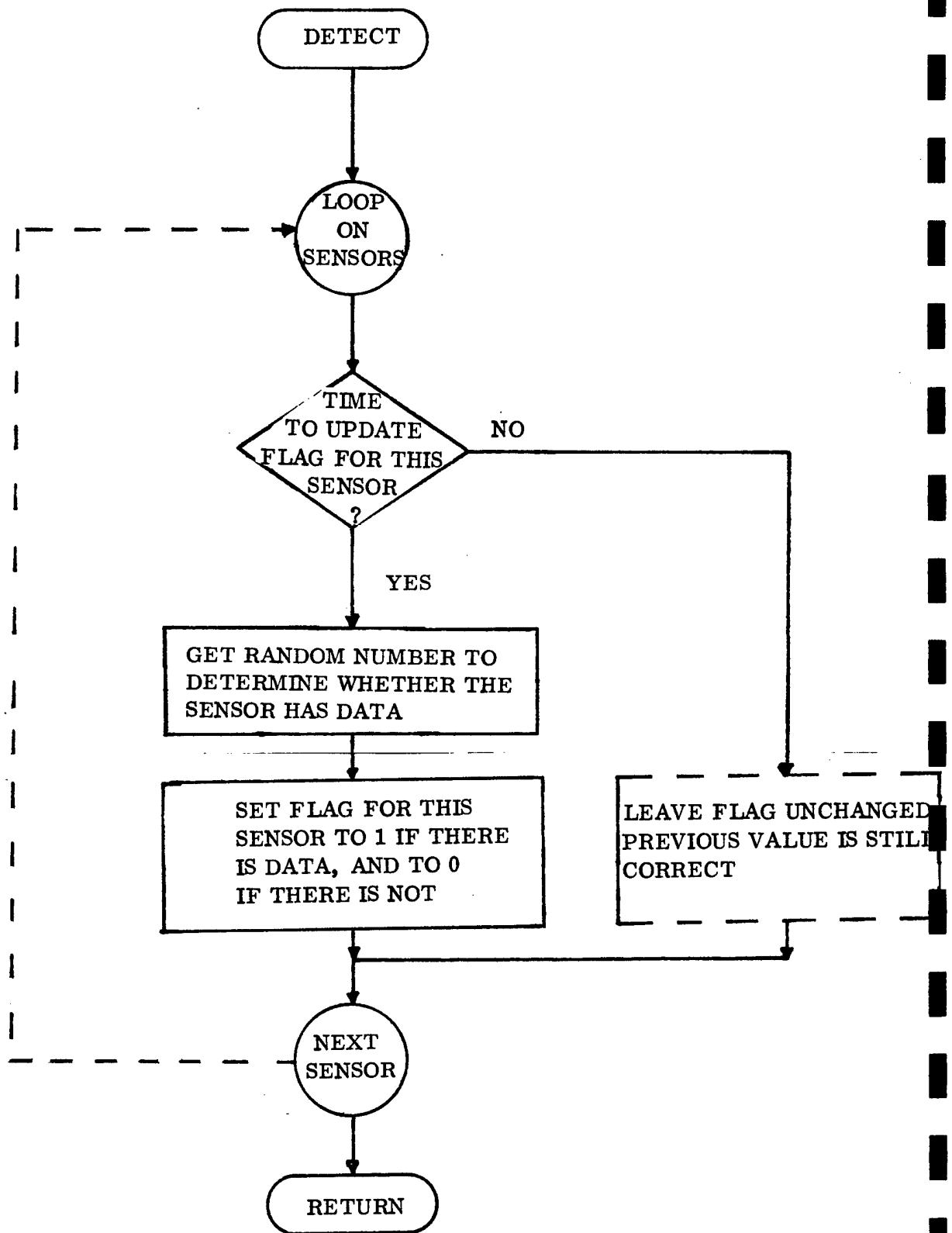


Figure 2-11. DETECT Flow Chart

the sensor has started a new period since the last time DETECT was called. DETECT then compares the probability of detection (one of the explicit inputs) to a random number and sets the data flag accordingly. The update time is then incremented by the length of the sensor period.

If the present time is less than the update time, the sensor is still in the same period it was in when DETECT was last called, so no action is taken.

Because DETECT keeps track of the last time each sensor's flag was updated, DETECT can be called any number of times in a given sensor period. The only requirement is that it be called at least once. This is guaranteed to happen because DETECT will be called whenever SENSOR is called on to send or drop a message.

#### 2.4.7 Conflict Determination Subroutine (CNFLCT)

CNFLCT is used in a sensor contention scheme to determine if any conflicts exist in the sensor answer slots. It is called from POLLER. This determination is based on the output of a random number generator.

When CNFLCT is called (see Figure 2-12), it initially clears all conflict flags and slot counters. The conflict flags tell the other subroutines if a particular sensor is conflicting with another in a sensor answer slot. The slot counters keep track of how many sensors have come up in each time slot. If more than one comes up in a time slot, there is a conflict, and neither sensor can be recognized. (The sensors must both try again the next time around.)

CNFLCT then checks each sensor to see if it has data. If it does, CNFLCT assigns the sensor randomly to a time slot. If not, CNFLCT goes to the next sensor.

Once all sensors with data have been assigned to time slots, CNFLCT checks each sensor for conflicts. It keeps track of which sensor was assigned to which slot; therefore, CNFLCT checks the slot counter to see if there is more than one sensor in that slot. If there is, it sets the conflict flag for that

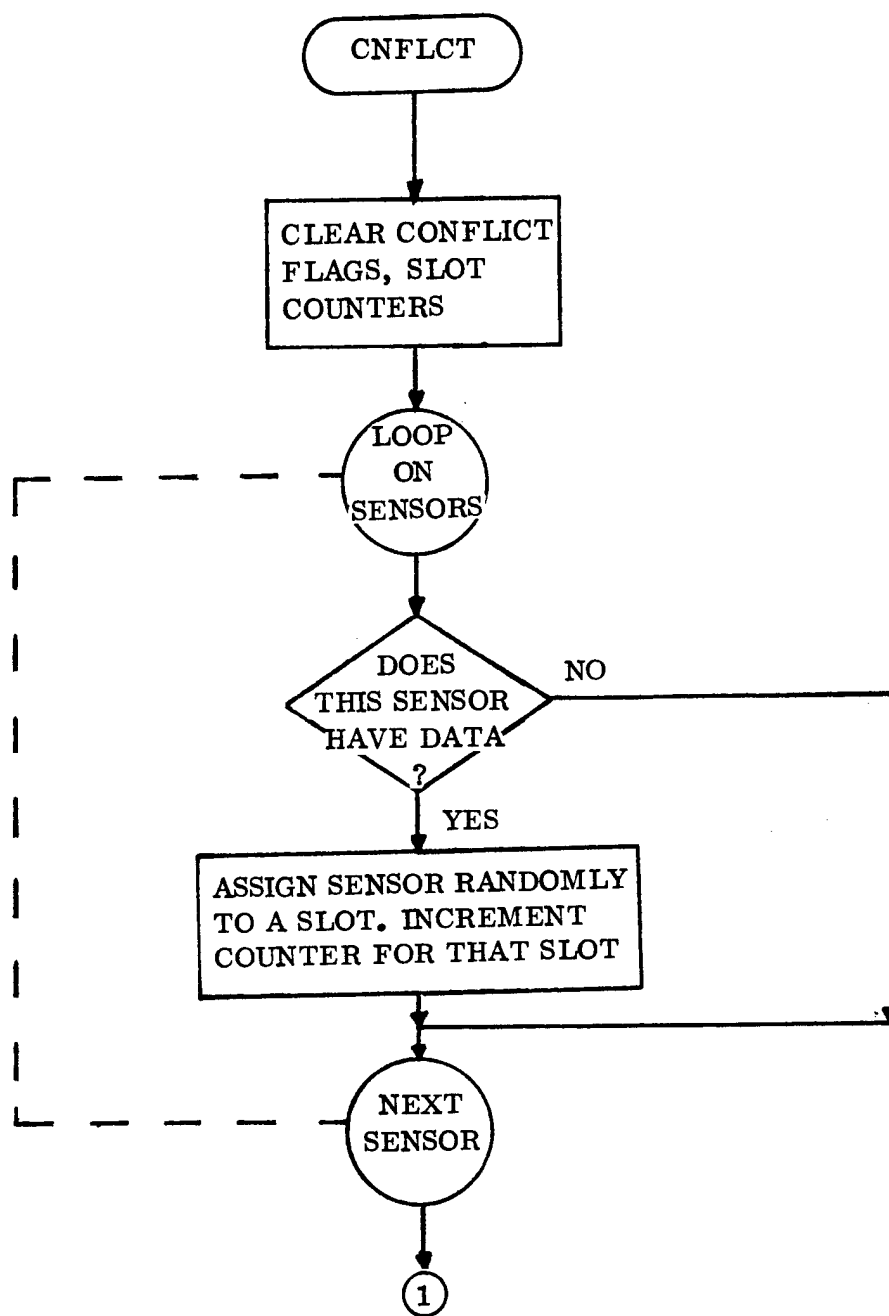


Figure 2-12. CNFLCT Flow Chart



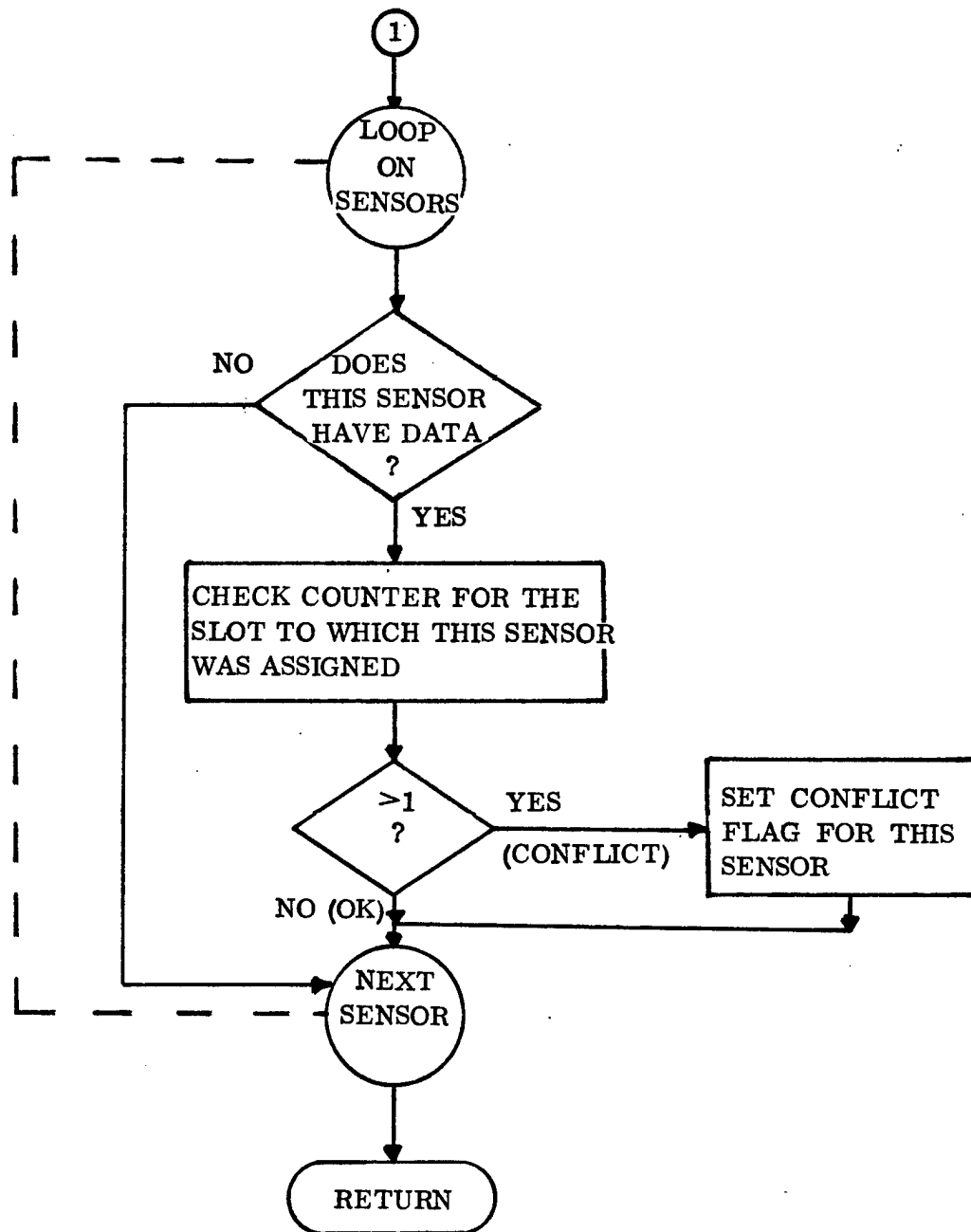


Figure 2-12. CNFLCT Flow Chart (Cont.)

sensor. If not, CNFLCT goes to the next sensor. Once all of the sensors have been examined in this fashion, CNFLCT returns to POLLER.

#### 2.4.8 Data Formatting and Printing Subroutine (PRINTR)

PRINTR is a straightforward routine. It is called by EXEC at the end of the run to summarize the events which occurred in the run. PRINTR does not affect the outcome of the run in any way.

Figure 2-13 summarizes the action of PRINTR on a top-tier level. On each 8 1/2 in X 11 in page output by PRINTR, there are three major sections (see Figure 2-4). The first is the run data section, which summarizes the explicit and strategic inputs and identifies the time and date of the run. The second is a header which prints column headings for the sensor data. The third is the data for up to 30 sensors. A fourth section, the line with the totals of each column, is printed on the last page only.

Figure 2-13 does not illustrate the pagination of printouts for runs with more than 30 sensors. Attempting to do so in a functional flow chart would tend to obscure rather than clarify the operation of the program. Suffice it to say that PRINTR makes a determination prior to printing anything of how many pages are required. PRINTR modifies sensor loops accordingly to start a new page after each 30th sensor.

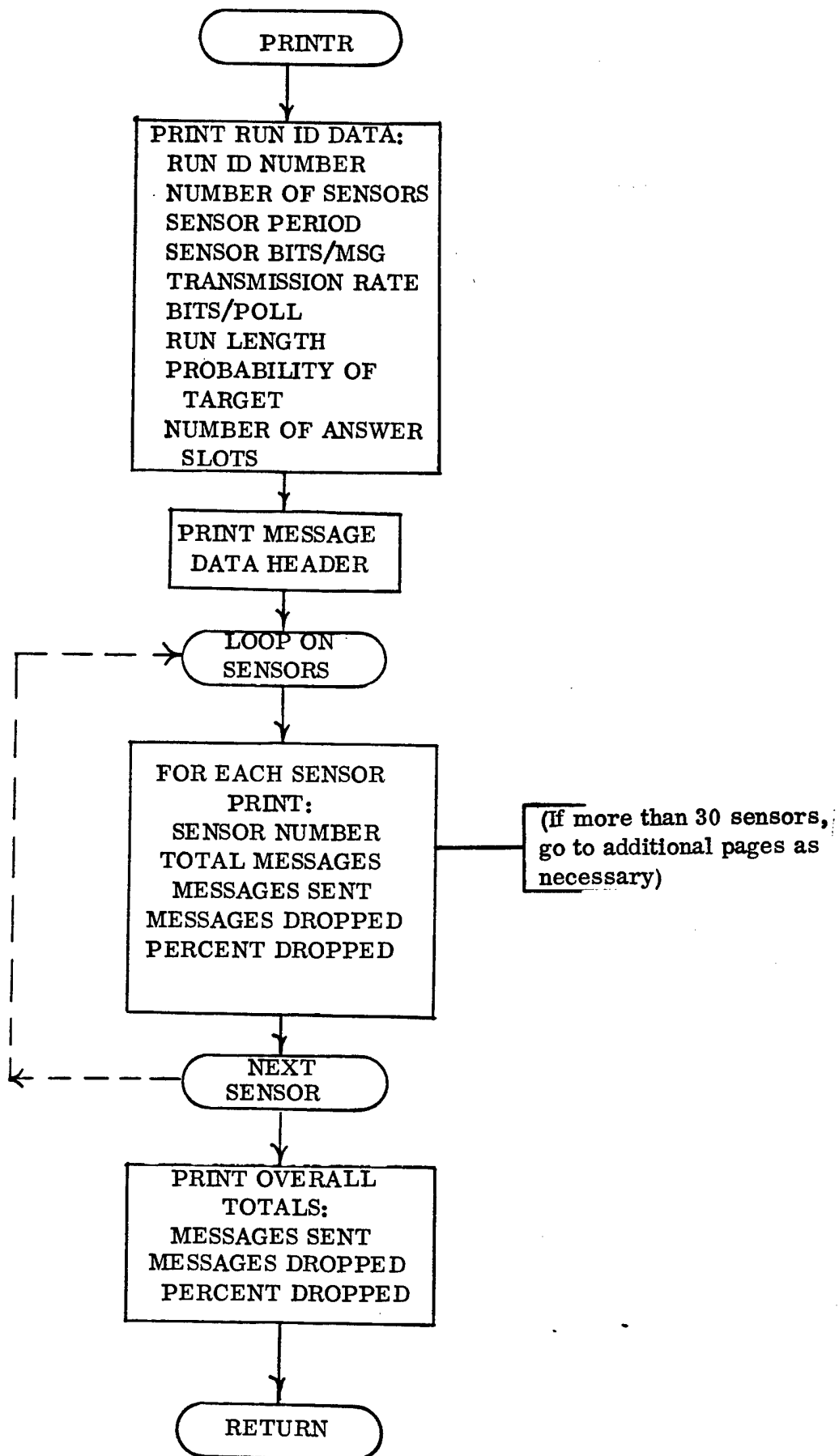


Figure 2-13. PRINTR Flow Chart

## SECTION 3

### SIMULATION RESULTS

Some of the variables discussed in Section 2 are given parameters, while the others are the parameters to be analyzed. For example, sensor buffer lengths and sensor intelligence are not infinitely variable; there are specific points which correspond to certain real or reasonable sensors. The probability of useful data or the number of sensors in the field, on the other hand, are not so limited. For a given sensor intelligence and buffer length, the probability of useful data and the number of sensors in the field were to be varied to determine the link's performance.

The given parameters include the following:

- Sensor period (300 or 30 seconds)
- Sensor buffer (5240 or 10,240 bits)
- Sensor intelligence
- Polling scheme (linear, group, and sensor contention)

The parameters to be analyzed include the following:

- Number of sensors (5-120)
- Transmit rate (300-4300 baud)
- Probability of useful data (0.1-0.9) (intelligent sensors only)
- Number of sensor reply slots (5-10) (sensor contention only)
- Simultaneous or even-interval sensor turn on

#### 3.1 RUNS MADE

A total of 208 runs were made. These runs were divided into 16 groups, each with 13 runs. The run number of each run identifies the group or series in which the run was made and the position of the run in that series. Each series of runs was made with a particular type of sensor. For example, the

100 series of runs consists of 13 runs, numbered between 101 and 194. The sensors are dumb, linear polling is used, and all sensors are turned on simultaneously. For certain sensor types, more than one series was required to exercise the appropriate parameters. Table 3-1 summarizes the 16 different series.

TABLE 3-1. RUN SERIES NUMBERS

SERIES	SENSORS	POLLING	TURN ON	PROBABILITY OF DATA	NUMBER OF ANSWER SLOTS
100	dumb	linear	simultaneous	—	—
200	dumb	linear	even-interval	—	—
300	dumb	group	even-interval	—	—
400	dumb	group	simultaneous	—	—
1100	intelligent	linear	simultaneous	0.5	—
1200	intelligent	linear	simultaneous	0.9	—
1300	intelligent	linear	simultaneous	0.1	—
1400	intelligent	linear	even-interval	0.5	—
1500	intelligent	linear	even-interval	0.1	—
1600	intelligent	linear	even-interval	0.9	—
1700	intelligent	linear	simultaneous	0.5	—
1800	intelligent	linear	simultaneous	0.9	—
1900	intelligent	linear	simultaneous	0.1	—
2100	intelligent	sensor contention	even-interval	0.5	5
2200	intelligent	sensor contention	even-interval	0.1	10
2300	intelligent	sensor contention	even-interval	0.5	10

It should be noted that the 1700, 1800, and 1900 series duplicate the 1100, 1200, and 1300 series. This was done to determine the effect of varying the bit rate of the poll. In the 1100, 1200, and 1300 series, the transmission rates for the sensor and poller were the same. In the 1700, 1800, and 1900 series, the polls were always transmitted at 300 bits per second (bps).

Within a given series, the last two digits indicate the number of sensors, the sensor data period, the sensor buffer length, and sensor transmission rate. Table 3-2 lists the coding for these digits.

For example, run 1525 would have intelligent sensors, linear polling, even-interval turn on, a probability of data of 0.1, 30 sensors, a sensor period of 300 seconds, 5240 bits in the sensor buffer, and a sensor transmission rate of 2400 bps. The printouts of all the runs are included in the Appendix.

TABLE 3-2. RUN NUMBER CODING, LAST TWO DIGITS

LAST 2 DIGITS OF RUN NUMBER	NUMBER OF SENSORS	SENSOR PERIOD	BUFFER LENGTH	TRANSMISSION RATE
01	5	300	5240	300
02	10	300	5240	300
12	10	300	5240	300
25	30	300	5240	2400
28	120	300	5240	2400
38	120	300	5240	2400
41	5	30	10240	300
61	5	30	10240	2400
62	10	30	10240	2400
72	10	30	10240	2400
82	10	30	10240	4800
84	20	30	10240	4800
94	20	30	10240	4800

## 3.2 ANALYSIS OF RESULTS

Each series of runs was designed to examine the capabilities of a particular sensor type, polling scheme, and turn on strategy. These series will be discussed individually. The reader may wish to refer to the runs in the Appendix.

### 3.2.1 Dumb Sensors, Linear Polling, Simultaneous Turn On (100 Series)

Since all sensors have the same data period, the simultaneous turn on strategy results in all unserviced sensors losing data at the same time. Since the sensors are polled in numerical order, all sensors with numbers higher than the last sensor polled will lose data simultaneously. This means that, given any two sensors, the one with the higher number must have at least as many dropped messages as the one with the lower numbers. For example, in run 102, sensors 1 and 2 have no dropped messages, sensor 3 has one, sensors 4 and 5 have two, and so on up to sensor 10 with 21 dropped messages. This shows clearly the point where the link becomes saturated and cannot handle additional sensors.

Figures 3-1 through 3-4 show the number of dropped messages plotted against the sensor number for the 100 series of runs. Each curve represents one run. Figure 3-1, showing the 100 series runs for a 300-bps transmission rate and a 5240-bit, 300-second buffer, shows that saturation occurs at 10 sensors. Figure 3-2 shows that increasing the transmission rate pushes the saturation point to about 106 to 108 sensors. Figure 3-3 shows the 10,240-bit, 300-second buffer, with a 2400-bps transmission rate. There is no figure for this buffer with a 300-bps transmission rate (run 141), because saturation occurs with the first sensor. In fact, the 41st run in all series loses 100 percent of the data, because it takes more than 30 seconds to transmit one message. Even at 2400 bps, saturation occurs at seven sensors. Increasing the transmission rate to 4800 bps causes saturation to occur at 13 sensors.

It should be noted that the number of messages dropped before saturation occurs varies significantly from run to run. This indicates the variability which could be expected in actual operation for the probabilities of interruption assumed in this study.

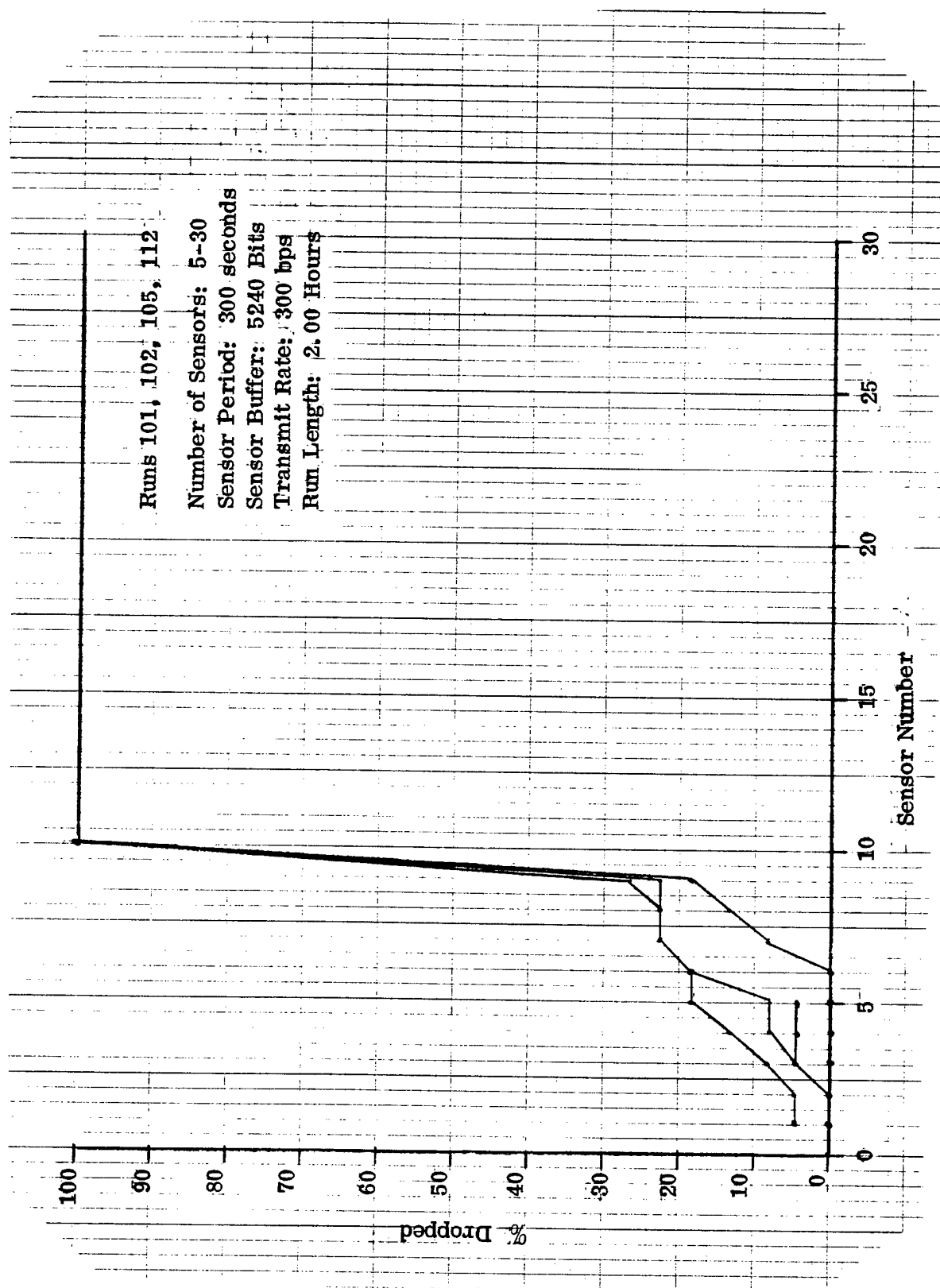


Figure 3-1. Percentage of Messages Dropped vs. Sensor Number:  
 100 Series, 300-Second, 5240-Bit Buffer at 300 bps



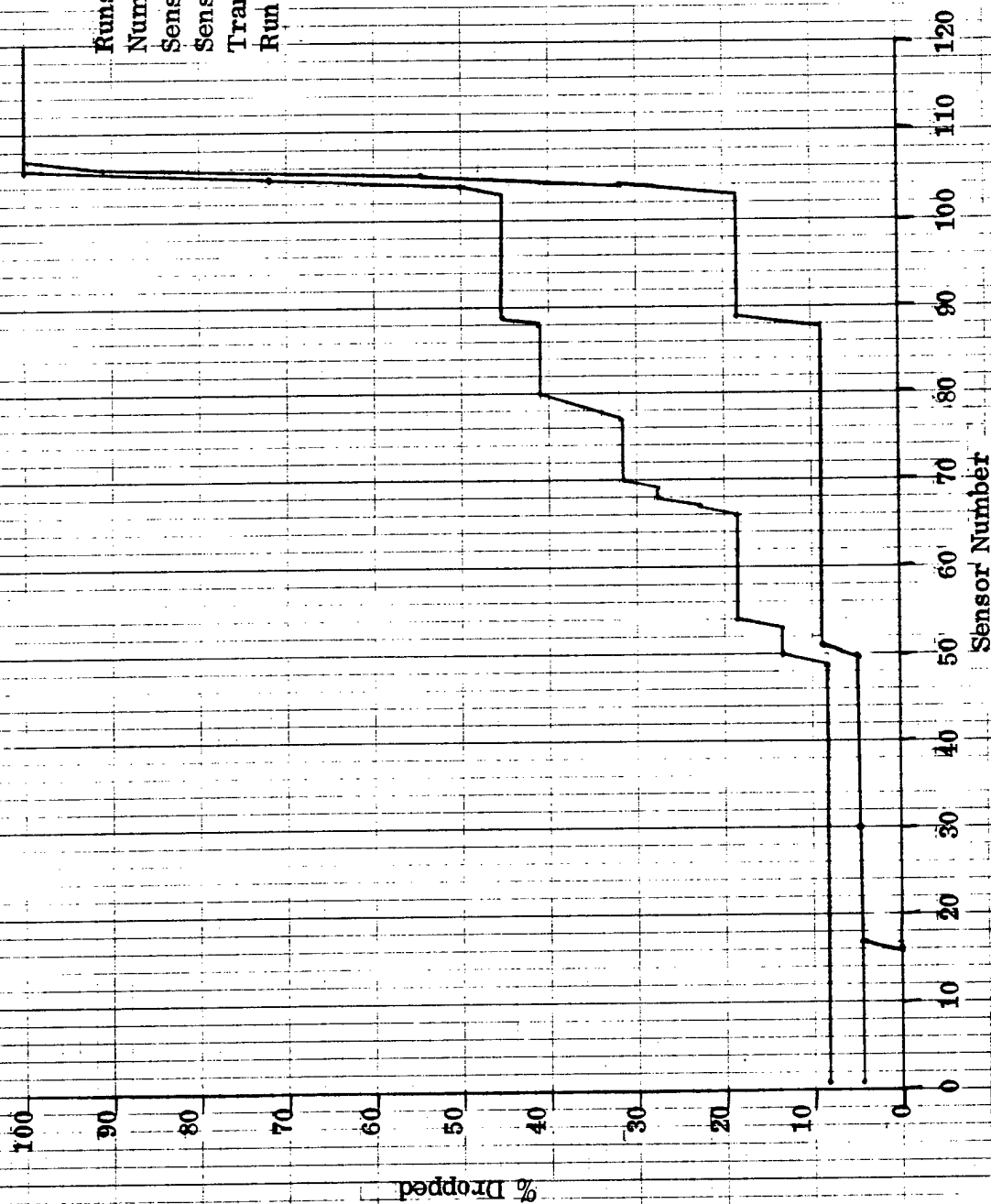


Figure 3-2. Percentage of Messages Dropped vs. Sensor Number:  
 100 Series, 300-Second, 5240 - Bit Buffer at 2400 bps

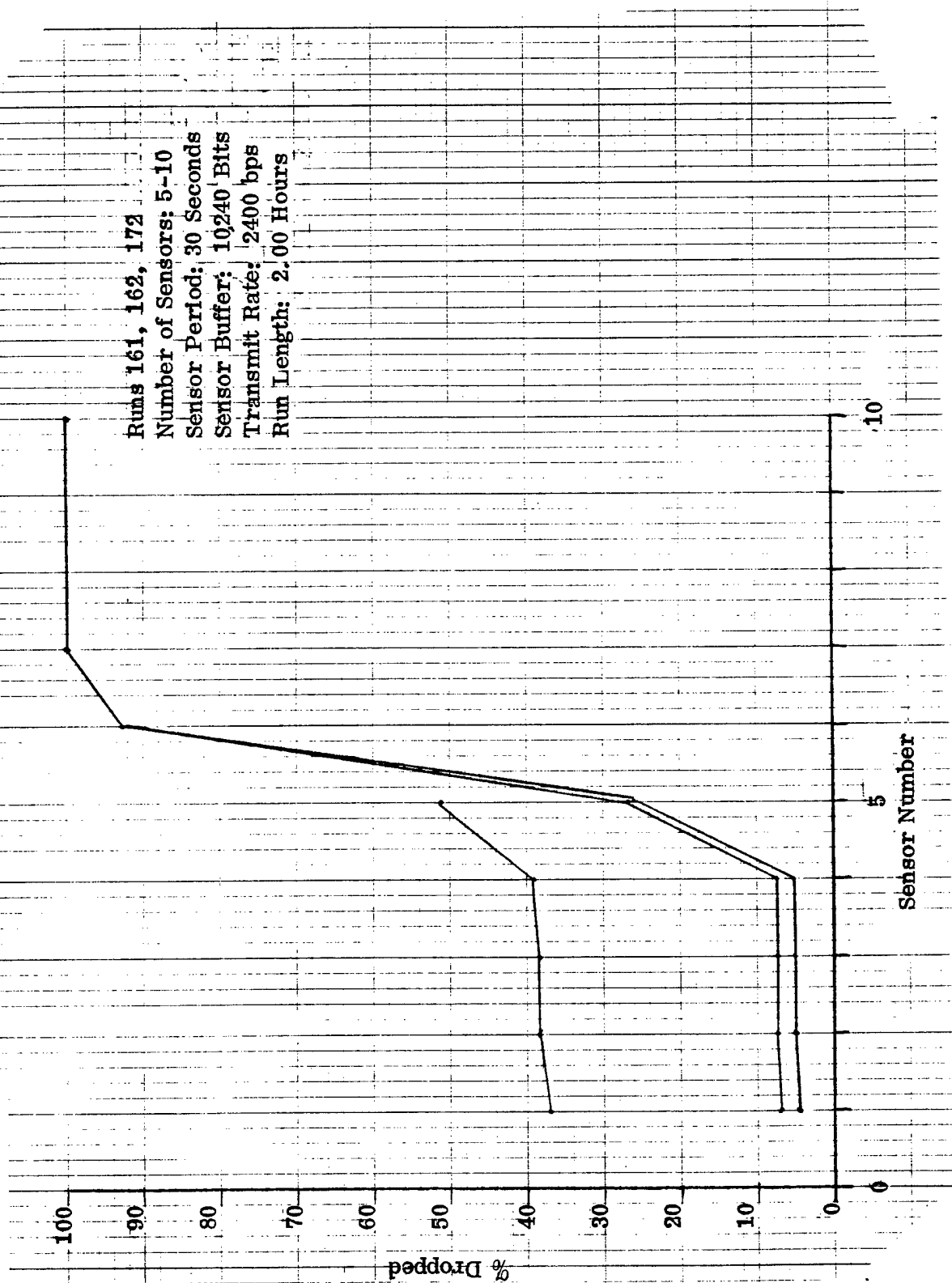


Figure 3-3. Percentage of Messages Dropped vs. Sensor Number:  
 100 Series, 30-Second, 10,240-Bit Buffer at 2400 bps

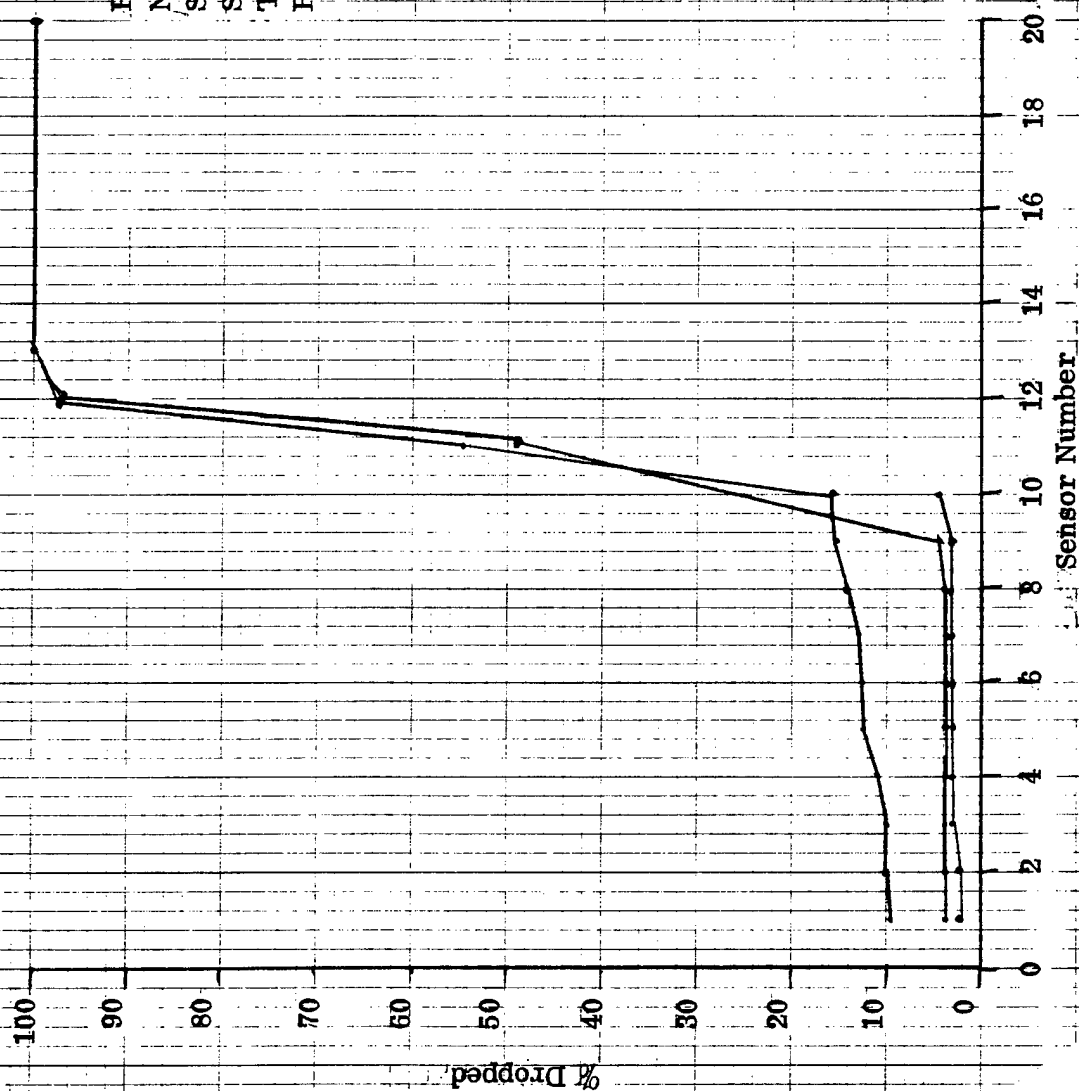


Figure 3-4. Percentage of Messages Dropped vs. Sensor Number:  
 100 Series, 30-Second, 10,240-Bit Buffer at 4800 bps

### 3.2.2 Dumb Sensors, Linear Polling, Even-Interval Turn On (200 Series)

The primary difference between the 100 and 200 series runs is that the effects of link saturation are spread over all the sensors, rather than being concentrated in the higher numbered runs. This situation exists because the 200 series runs were made with the sensors turning on one after another. Their cycles are staggered; they do not all lose data at once. The overall percentage of dropped data does not appear to vary significantly between the even-interval turn on and the simultaneous turn on strategies. There are, of course, variations between individual corresponding runs. For example, run 212 corresponds to run 112, but has 10 percent fewer dropped messages, while run 284, corresponding to run 184, has 14 percent more dropped messages. Over runs 201 through 294, the differences average out, and the overall difference between the 100 and 200 series runs is only about 0.4 percent.

Figure 3-5 shows the average percentage dropped versus the number of sensors for each run in the 200 series. The dotted lines identify groups of runs with the same sensor period, buffer length, and transmission rate. The groups show the increase in percentage of data lost as the number of sensors is increased. The run numbers are printed next to each point. It should be noted that run 241, with the 30-second period, 10,240-bit buffer, and transmission rate of 300 bps, drops 100 percent of the messages, just as the corresponding 100 series run, run 141, did.

### 3.2.3 Dumb Sensors, Group Polling, Even-Interval Turn On (300 Series)

The only difference between the 200 and 300 series runs is the polling strategy. The group polling strategy reduces the time spent in polling, which in turn should reduce the percentage of dropped messages. However, since the polls are short compared to the data transmission, the reduction should not be large. In fact, comparing the overall 200 series to the overall 300

200 Series:

Dumb Sensors,  
Linear Polling,  
Even-Interval Turn On

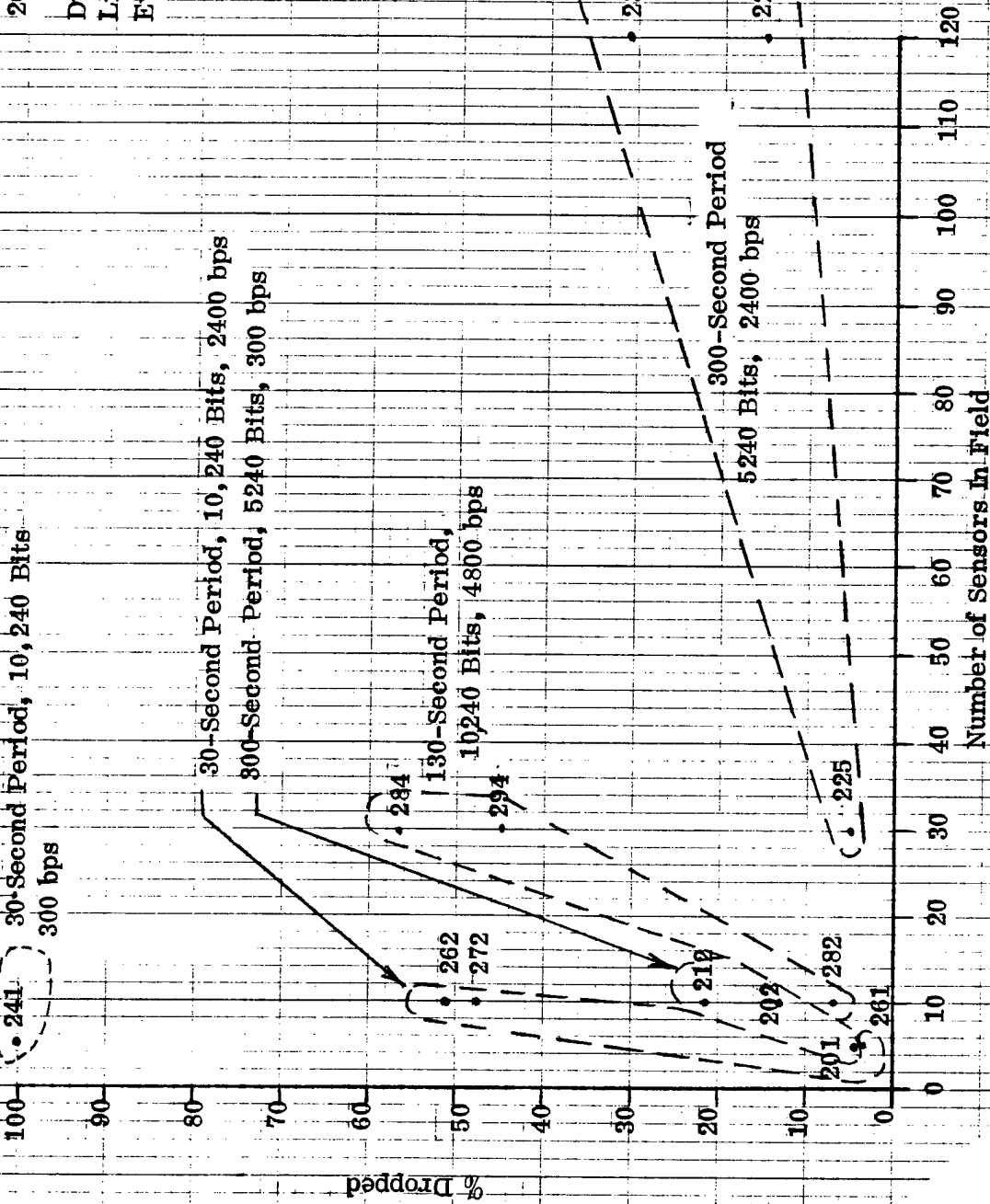


Figure 3-5. Percentage of Messages Dropped vs. Sensor Field Size:  
Dumb Sensors, Linear Polling, and Even-Interval Turn On

series runs, the 300 series runs drop 6.8 percent fewer messages. As before, the run with the 30-second period, 10,240-bit buffer, and transmission rate of 300 bps, run 341, drops all messages.

#### 3.2.4 Dumb Sensors, Group Polling, Simultaneous Turn On (400 Series)

The 400 series and the 100 series are related the same way as the 300 series and 200 series are. That is, the conditions are the same except that the 400 series has group polling, and the 100 series has linear polling. On the average, the 400 series runs show 16.8 percent fewer messages dropped than the 100 series runs. In addition, since the 400 series runs have the simultaneous turn on strategy, the saturation of the link is visible as a function of the sensor number, just as it was in the 100 series runs. Figures 3-6 through 3-9 show the number of dropped messages plotted against the sensor number for the 400 series of runs. Comparing these figures to Figures 3-1 through 3-4 shows the advantage of group polling over linear polling. Figures 3-6 and 3-1 both show saturation occurring around the tenth sensor, but Figure 3-6, with group polling, has a slightly lower overall percentage of lost messages. Figure 3-7 has a distinctly lower percentage of lost messages than Figure 3-2, as well as a higher saturation point. In Figure 3-2 (linear polling), saturation occurs around sensor number 106 or 107. In Figure 3-7 (group polling), saturation is not reached by the 120th sensor. Comparing Figures 3-3 and 3-8, saturation occurs at the same point, but the group polling runs (Figure 3-9) drop fewer messages before saturation is reached. Finally, Figure 3-9 (group polling), shows a higher saturation point than does Figure 3-4 (linear polling), despite the fact that one run in Figure 3-9 does poorly in terms of messages dropped. The reason for this discrepancy is that run 482 lost the link more often than would be expected. This sort of variation is expected in a Monte Carlo model — that is, if it can happen in the field from time to time, it will also happen in the simulation from time to time.

Runs 401, 402, 412  
Number of Sensors: 5-10  
Sensor Period: 300 Second  
Sensor Buffer: 5240 Bits  
Transmit Rate: 300 bps  
Run Length: 2.00 Hours

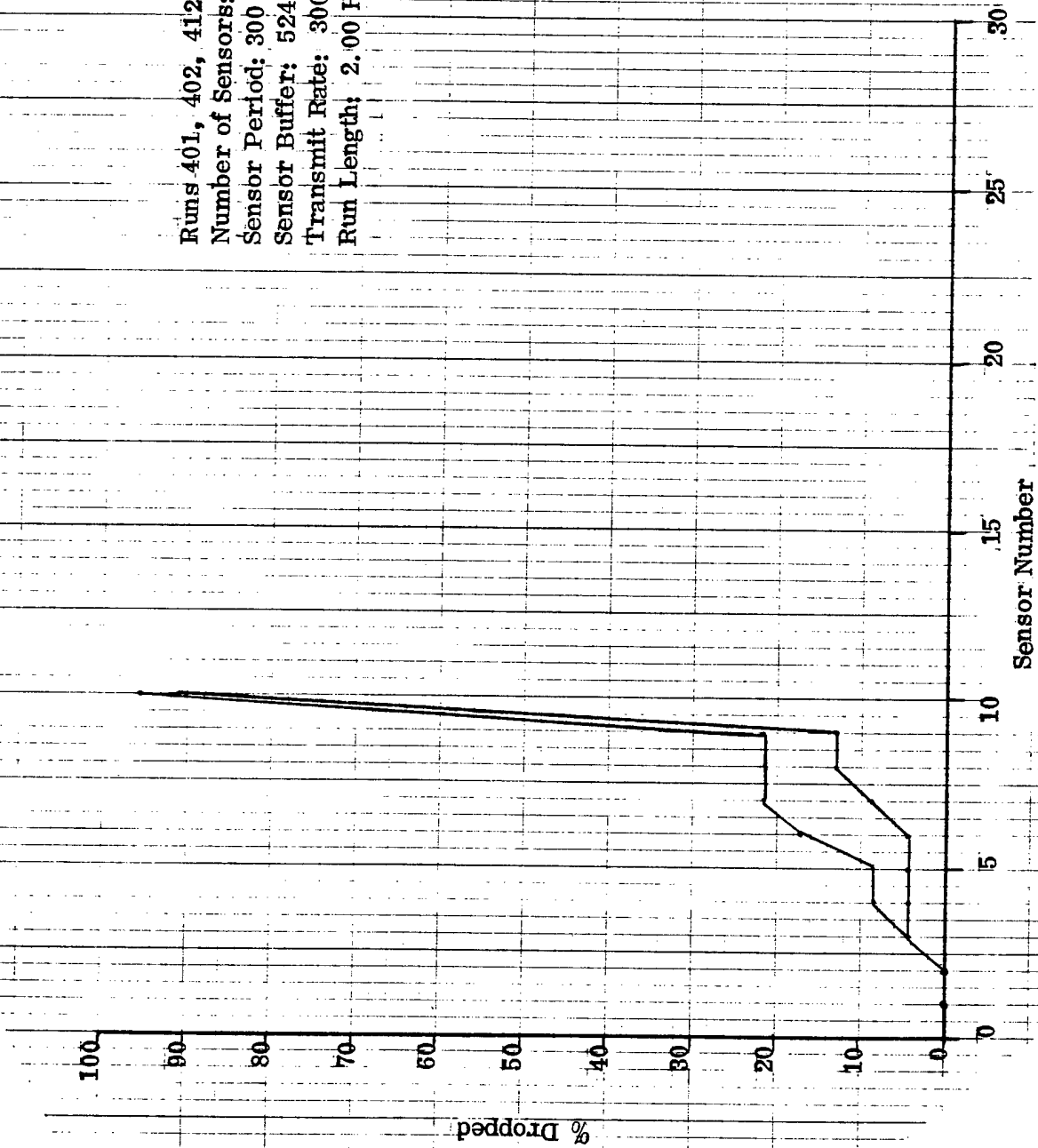


Figure 3-6. Percentage of Messages Dropped vs. Sensor Number:  
400 Series, 300-Second, 5240-Bit Buffer at 2400 bps

Runs 425, 428, 438  
 Number of Sensors: 30-120  
 Sensor Period: 300 Seconds  
 Sensor Buffer: 5240 Bits  
 Transmit Rate: 2400 bps  
 Run Length: 2.00 Hours

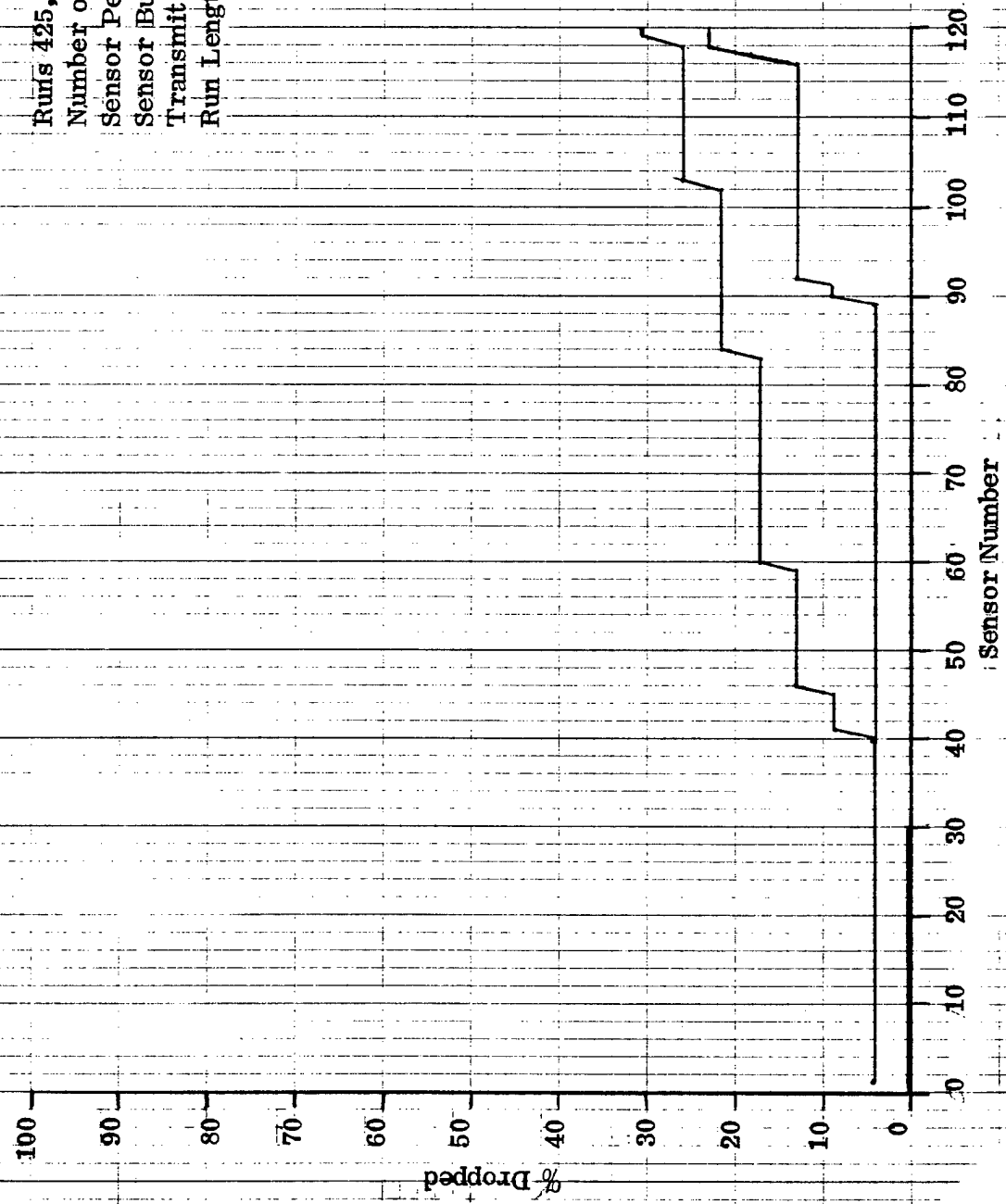


Figure 3-7. Percentage of Messages Dropped vs. Sensor Number:  
 400 Series, 300-Second, 5240-Bit Buffer at 2400 bps



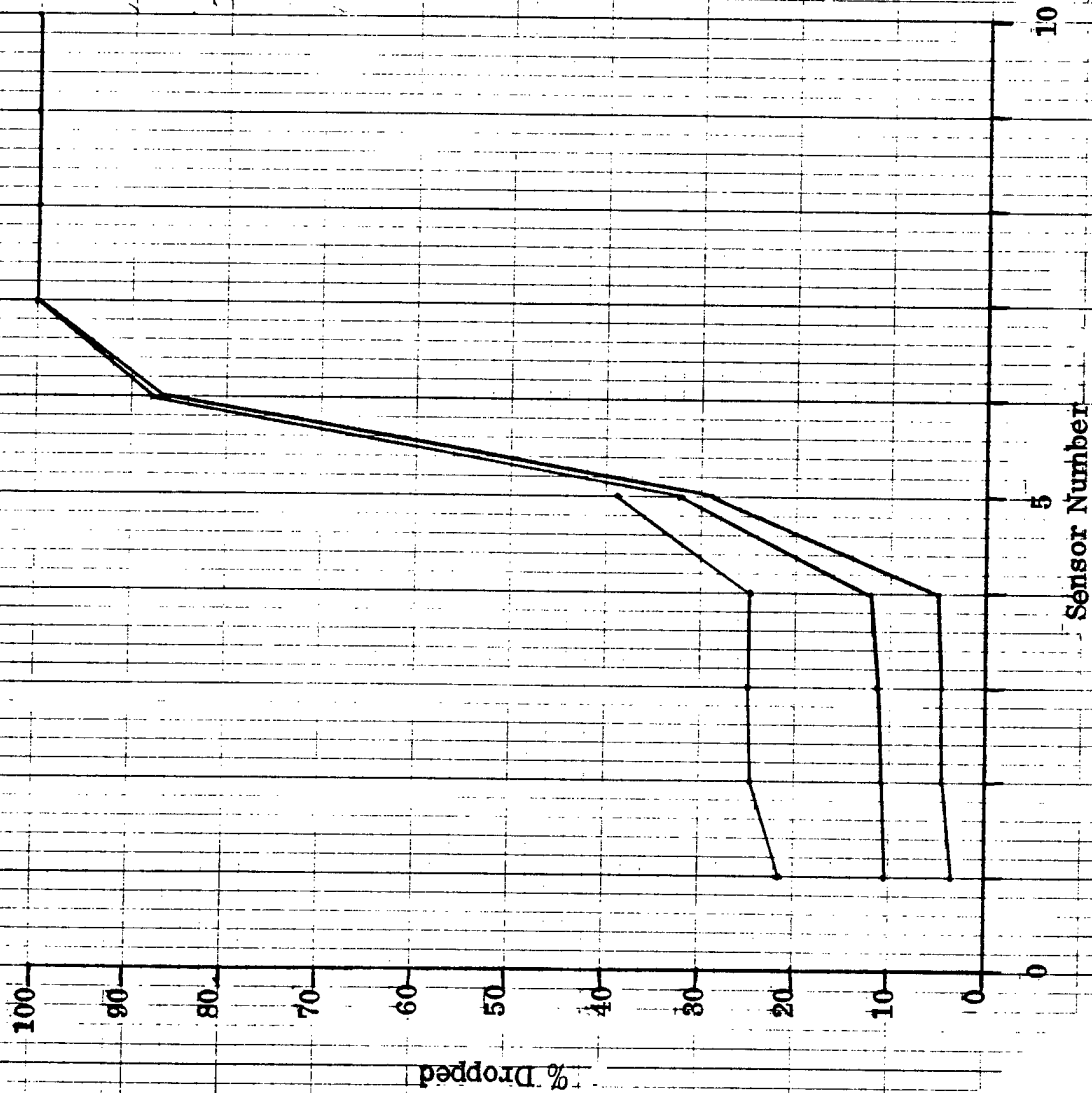


Figure 3-8. Percentage of Messages Dropped vs. Sensor Number:  
 400 Series, 30-Second, 10,240-Bit Buffer at 2400 bps

Runs 482, 484, 494  
Number of Sensors: 10-20  
Sensor Period: 30 Seconds  
Sensor Buffer: 10,240 bps  
Run Length: 2.00 Hours

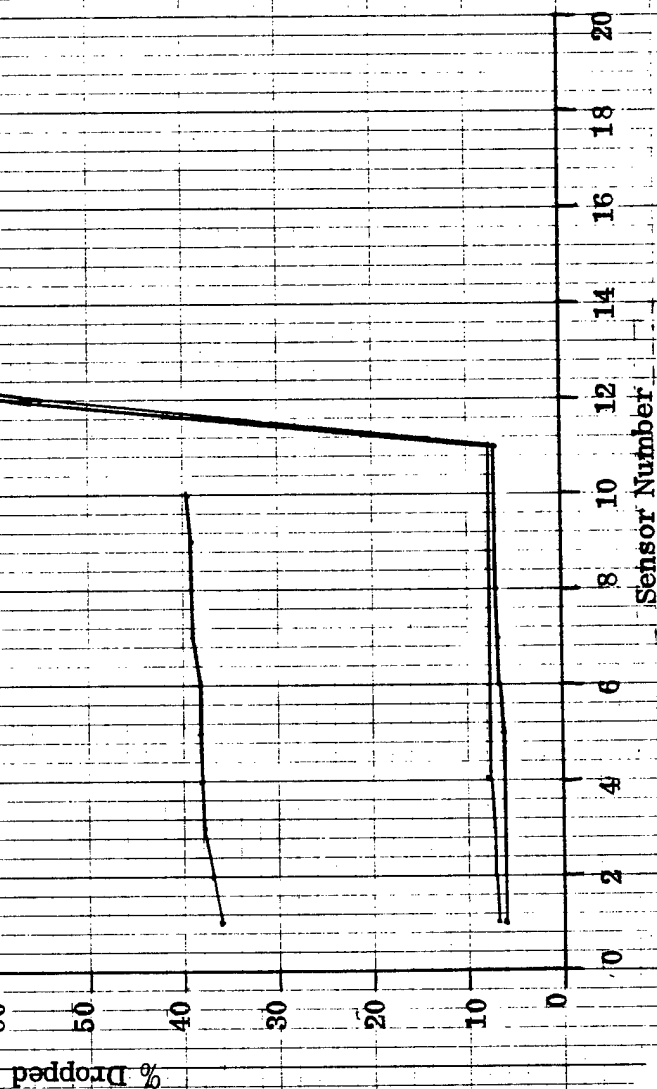


Figure 3-9. Percentage of Messages Dropped vs. Sensor Number:  
400 Series, 30-Second, 10,240-Bit Buffer at 4800 bps

### 3.2.5 Intelligent Sensors, Linear Polling, Simultaneous Turn On (1100-1300 Series)

These three series of runs simulate the behavior of the system if the sensors are capable of determining whether they have useful data. If they do have useful data, the sensors transmit their buffers when polled. If not, the sensors transmit only short status messages, in order that the poller can move on to the next sensor more quickly. This has the potential to save a great deal of link time if the probability of the sensors having data is significantly less than unity. This probability (called probability of detection), is set to 0.5 for the 1100 series, to 0.9 for the 1200 series, and to 0.1 for the 1300 series.

The intelligent sensor runs all do significantly better than the equivalent runs with dumb sensors. The 1200 series runs, with a 90-percent probability of detection, drop 21.9 percent fewer messages on the average than the corresponding 100 series runs. The 1100 series, with a 50-percent probability of detection, drop 60.1 percent fewer messages. The 1300 series runs, with a 10-percent probability of detection, drop 72.7 percent fewer messages. Table 3-3 compares the 1100, 1200, and 1300 series runs to the 100 series runs.

The fact that a smaller benefit is derived by going from a 50- to a 10-percent probability of detection than by going from 90 percent to 50 percent suggests that something is limiting the benefits which can be realized through the application of intelligent sensors. In fact, this is the case. With dumb sensors, saturation of the link is the primary problem as the size of the sensor field is increased. Intelligent sensors help to reduce the effects of link saturation, but can do nothing to prevent a competing user from taking away the link at random intervals. (Nor can it help in the case of runs 1141, 1241, and 1341. These runs are made with the 30-second, 10,240-bit buffer at 300 bps. A single message saturates the link under these circumstances, so that no message gets through, intelligent sensor or not.)

TABLE 3-3. COMPARISON OF DROPPED MESSAGES IN 100 SERIES RUNS TO 1100-1300 SERIES RUNS

RUN	% DROPPED, 100 SERIES	% DROPPED, 1100 SERIES	%* IMPROVED	% DROPPED, 1200 SERIES	%* IMPROVED	% DROPPED, 1300 SERIES	%* IMPROVED
01	2.7	0.0	100.0	0.0	100.0	0.0	100.0
02	20.5	3.7	82.0	11.6	43.4	0.0	100.0
12	24.1	15.3	36.5	10.8	55.2	0.0	100.0
25	4.5	0.0	100.0	5.7	-21.1	0.0	100.0
28	19.6	4.6	76.5	16.7	14.8	0.0	100.0
38	31.9	0.0	100.0	7.1	77.7	11.2	64.9
41	100.0	100.0	0.0	100.0	0.0	100.0	0.0
61	40.8	6.2	84.8	19.5	52.2	5.7	86.0
62	54.9	17.5	68.1	52.4	4.6	4.3	92.2
72	53.9	18.6	65.5	47.0	12.8	0.0	100.0
82	2.9	9.6	-69.8	6.2	-53.2	15.0	-80.7
84	49.3	14.0	71.6	52.4	-5.9	6.2	87.4
94	53.3	18.4	65.5	50.8	4.7	2.5	95.3
Average	—		60.1		21.9		72.7
*Relative to corresponding 100 series run.							

It should also be noted that the intelligent sensors, since they may or may not lose data when they are not polled each period, do not exhibit the same saturation curves shown in Figures 3-1 to 3-4 and 3-6 to 3-9. It is for this reason that these curves are not drawn up for the intelligent sensors, even though the simultaneous turn on strategy is used.

### 3.2.6 Intelligent Sensors, Linear Polling, Even-Interval Turn On (1400-1600 Series)

The 1400 through 1600 series runs correspond to the 1100 through 1300 series, except that the former use the even-interval turn on strategy, while the latter use simultaneous turn on. Run 1400 uses a probability of detection of 0.5, run 1500 uses 0.1, and run 1600 uses 0.9. Table 3-4 compares the 1400, 1500, and 1600 series runs to the 400 series runs. The 400 series runs correspond to the 1400 through 1600 series, except that the 400 series has dumb sensors.

The 1600 series, with a probability of detection of 0.9, shows an improvement over the 400 series of 22.3 percent. This is consistent with the results found in the simultaneous turn on comparison, where the 1200 series showed a 21.9-percent improvement over the 100 series. The 1400 series runs, with a probability of detection of 0.5, shows a 42.2-percent improvement over the 400 series, while the corresponding simultaneous turn on series (1100) showed a 60.1-percent improvement over the 100 series. Similarly, the 1500 series, with a probability of detection of 0.1, showed a 52.3-percent improvement over the 400 series, while the 1300 series showed a 72.7-percent improvement over the 100 series.

These results indicate that going to intelligent sensors helped less with the even-interval turn on than it did with the simultaneous turn on, at least for the lower probabilities of detection. The difference is not large, especially considering the random nature of the model, and is due primarily to the effects of

TABLE 3-4. COMPARISON OF DROPPED MESSAGES IN 400 SERIES RUNS TO 1400-1600 SERIES RUNS

RUN	% DROPPED, 400 SERIES	% DROPPED, 1400 SERIES	%* IMPROVED	% DROPPED, 1500 SERIES	%* IMPROVED	% DROPPED, 1600 SERIES	%* IMPROVED
01	2.6	8.3	-68.7	0.0	100.0	3.0	-13.3
02	14.0	9.7	30.7	9.1	35.0	4.2	70.0
12	20.0	6.5	67.5	0.0	100.0	4.5	77.5
25	0.0	4.3	-100.0	11.1	-100.0	4.5	-100.0
28	14.2	4.1	71.1	7.9	44.4	11.2	21.1
38	6.9	4.5	34.8	7.3	-5.5	10.2	-32.4
41	100.0	100.0	0.0	100.0	0.0	100.0	0.0
61	27.0	0.7	97.4	7.1	73.7	2.7	90.0
62	52.7	7.8	85.2	13.1	75.1	36.9	30.0
72	56.4	1.5	97.3	6.1	89.2	42.1	25.4
82	38.1	10.8	71.7	4.1	89.2	1.5	96.1
84	46.4	6.0	87.1	9.2	80.2	40.8	12.1
94	46.1	11.8	74.4	0.9	98.0	40.1	13.0
Average	—		42.2		52.3		22.3
*Relative to corresponding 400 series runs.							

run 425. This run never lost the link in the time slots, and therefore lost no messages. Because there was no similar "lucky" run in the 100 series, the even-interval turn on runs do not show as much of a difference between dumb and intelligent sensors as do the simultaneous turn on runs.

### 3.2.7 Intelligent Sensors, Linear Polling, Even-Interval Turn On, Poll at 300 bps (1700-1900 Series)

All previous runs assumed a 240-bit poll transmitted at the same rate as the sensors transmitted their data. The 1700 through 1900 series runs were made to determine the effect of requiring the poll to be transmitted at 300 bps, regardless of the sensor data transmission rate. The 1700 through 1900 series correspond exactly to the 1100 through 1300 series, except that the poll is always at 300 bps. Table 3-5 summarizes the effects of this change.

Since the sensor transmission rate is usually faster than 300 bps, the 300-bps poll will generally cut down the overall data rate, which should increase the percentage of dropped messages. Table 2-3 shows that this is indeed the case.

The table shows that the 300-bps poll increases the dropped messages by 16.0 percent to 45.5 percent, depending on the series. It should be noted that in many cases, the amount of data actually dropped by either series is low (less than 10 percent), but the percentage difference is high. In other words, if one run drops no messages, it is 100 percent better than another run, whether the other run drops 1 percent or 99 percent of its messages.

### 3.2.8 Intelligent Sensors, Sensor Contention, Even-Interval Turn On, 300-bps Poll, With a Probability of Detection of 0.1 (2100, 2200 Series)

The 2100 and 2200 series of runs were made to evaluate the performance of sensor contention polling. The 2100 series runs assumed 5 answer slots, while the 2200 series assumed 10. The 1900 series is the same as these series except that the 1900 series uses linear polling, rather than sensor contention. Table 3-6 compares the 2100 and 2200 series runs to the 1900 series.

TABLE 3-5. EFFECT OF RESTRICTING POLL SPEED TO 300 bps

RUN	1100	1700	$\Delta\%*$	1200	1800	$\Delta\%*$	1300	1900	$\Delta\%*$
01	0.0	8.3	-100.0	0.0	7.6	-100.0	0.0	50.0	-100.0
02	3.7	9.7	-61.9	11.6	7.6	34.5	0.0	0.0	0.0
12	15.3	6.5	57.5	10.8	4.2	61.1	0.0	12.5	-100.0
25	0.0	4.1	-100.0	5.7	5.5	3.5	0.0	16.3	-100.0
28	4.6	11.9	-61.3	16.7	33.4	-50.0	0.0	5.2	-100.0
38	0.0	21.0	-100.0	7.1	31.6	-77.5	11.2	4.8	57.1
41	100.0	100.0	0.0	100.0	100.0	0.0	100.0	100.0	0.0
61	6.2	22.7	-72.7	19.5	13.8	29.2	5.7	1.0	82.5
62	17.5	22.0	-20.5	52.4	51.9	1.0	4.3	0.0	100.0
72	18.6	29.7	-37.4	47.0	52.3	-10.1	0.0	8.8	-100.0
82	9.6	5.2	45.8	6.2	21.7	-71.4	15.0	4.9	67.3
84	14.0	54.6	-74.4	52.4	58.9	-11.0	6.2	70.3	-91.2
94	18.4	55.6	-66.9	50.8	61.5	-17.4	2.5	68.2	-96.3
Average	—	—	-45.5	—	—	-16.0	—	—	-29.3
*Positive indicates 300 bps did better, negative indicates 300 bps did worse.									



TABLE 3-6. COMPARISON OF SENSOR CONTENTION TO LINEAR POLLING  
FOR PROBABILITY OF DETECTION OF 0.1

RUN	1900	2100	2200	$\Delta\%*$ 1900 vs 2100	$\Delta\%*$ 1900 vs 2200
01	50.0	44.4	44.4	11.2	11.2
02	0.0	47.4	45.4	-100.0	-100.0
12	12.5	50.0	46.9	-75.0	-73.3
25	16.3	45.5	47.7	-64.2	-65.8
28	5.2	46.5	46.9	-88.8	-88.9
38	4.8	48.3	46.2	-90.1	-89.6
41	100.0	100.0	100.0	0.0	0.0
61	1.0	47.8	48.0	-97.9	-97.9
62	0.0	50.8	50.6	-100.0	-100.0
72	8.8	50.1	49.2	-82.4	-82.1
82	4.9	48.0	50.4	-89.8	-90.3
84	70.3	52.5	50.2	25.3	28.6
94	68.2	50.1	48.6	26.5	28.7
Average	—	—	—	-55.8	-55.4
*Positive indicates better with sensor contention, negative indicates better with linear polling.					

Table 3-6 indicates that the sensor contention polling scheme generally drops much more data than does the linear polling scheme. This is probably due to the additional time required for the answer slots and to conflicts between sensors in the answer slots. Raising the number of answer slots from 5 to 10 does not make a large difference, because the reduction in conflicts is offset by the increase in time.

There were two situations, however, where the sensor contention scheme did better than the linear polling scheme. The first situation involved runs 2101 and 2201, which both did better than run 1901. This is due to the random nature

of the simulation. Runs 1902 and 1912 also did better than 1901, even though they had more sensors. The second situation involved very high-speed data transmission (4800 bps). In this situation, the additional time required for the answer slots was minimized, and the propagation delay required for multiple individual (linear) polls became large compared to the time required for a single set of contention slots with only one propagation delay. This phenomenon is evident in runs 2184 and 2284, which both do better than run 1984, and runs 2194 and 2294, which both do better than run 1994. All six of these runs use 4800-bps sensor data transmission, with 20 sensors.

### 3.2.9 Intelligent Sensors, Sensor Contention, Even-Interval Turn On, 300-bps Poll, With a Probability of Detection of 0.5 (2300 Series)

The 2300 series is identical to the 2200 series except that the probability of detection is 0.5. The 2300 series should be compared to the 1900 series (linear polling), just as the 2200 series was. Table 3-7 shows the results of this comparison.

In every instance (except, of course, run 1741 versus run 2341, where all messages are dropped), the linear polling scheme outperforms sensor contention. The margin is fairly large, and leaves little doubt that sensor contention should not be considered if the probability of detection is as high as 0.5.

TABLE 3-7. COMPARISON OF SENSOR CONTENTION TO LINEAR POLLING  
FOR A PROBABILITY OF DETECTION OF 0.5

RUN	1700	2300	$\Delta\%^*$
01	8.3	37.0	-77.6
02	9.7	34.9	-72.2
12	6.5	35.2	-81.5
25	4.1	33.7	-87.8
28	11.9	83.4	-85.7
38	21.0	84.6	-75.2
41	100.0	100.0	0.0
61	22.7	37.1	-38.8
62	22.0	49.2	-55.3
72	29.7	54.7	-45.7
82	5.2	38.3	-86.4
84	54.6	62.2	-12.2
94	55.6	59.8	-7.0
Average	—	—	-55.8
*Positive = better with sensor contention, negative = better with linear polling.			

## SECTION 4

### CONCLUSIONS

This report considers the performance of various data transmission schemes for a number of sensors connected to a single poller over a given multi-user multiplexed data link. A Monte-Carlo computer simulation has been written to provide the data for this analysis. The link is taken from the sensors and poller at random intervals by a competing user. When the sensors and poller control the link, they are free to use whatever protocol they wish. They also may use various transmission rates.

The measure of the link's performance is the percentage of messages dropped by the sensors when the poller is unable to interrogate them. The effects of one parameter have been studied by varying that parameter while holding the others constant.

The primary causes of dropped messages are link saturation and the loss of the link to the competing user. Transmission speed, sensor buffer length, and sensor period have an approximately linear effect on link saturation. Link saturation was measured by observing how many sensors could be put in the field before the amount of data transmitted over the link stops increasing as new sensors are added.

One combination of transmission speed, sensor buffer length, and sensor period has proved to be completely unworkable. When the 10,240-bit buffer, updated at 30-second intervals, is combined with the 300 bps transmission rate, all messages are always dropped, because 34.1 seconds are required to transmit 10,240-bits at 300 bps. Since this is 30 seconds worth of data, the link is saturated even if there is only one sensor. In addition, the link is only available for 30 seconds at a time, so even the first message can never be transmitted.

#### 4.1 DUMB SENSORS

With dumb sensors, there is no significant difference between the simultaneous and the even-interval turn on philosophy in terms of the average percentage of data lost. However, the simultaneous turn on strategy assigns higher priorities to the lowest numbered sensors, whereas the even-interval strategy effectively assigns priority evenly across all sensors. The latter allows a larger sensor field if a higher data loss rate can be tolerated. In the simultaneous turn on strategy, sensors added to an already saturated link are never polled. Shown in Table 4-1 is the largest field before saturation occurs for different combinations of buffer length, sensor period, and transmission rate.

The use of group polling slightly increases the number of sensors which can be put in the field before saturation occurs. The relationship between the simultaneous and even-interval turn on strategies is the same as with linear polling. The largest field before saturation occurs with group polling for the combinations of buffer length, sensor period, and transmission rate shown in Table 4-2.

TABLE 4-1. SATURATION SENSOR FIELD SIZES FOR  
DUMB SENSORS WITH LINEAR POLLING

TRANSMIT RATE (bps)	SENSOR PERIOD (sec)	BUFFER SIZE (bits)	MAXIMUM NUMBER OF SENSORS
300	300	5,240	9
2400	300	5,240	103-104
300	30	10,240	0
2400	30	10,240	6
4800	30	10,240	12

TABLE 4-2. SATURATION SENSOR FIELD SIZES FOR  
DUMB SENSORS WITH GROUP POLLING

TRANSMIT RATE (bps)	SENSOR PERIOD (sec)	BUFFER SIZE (bits)	MAXIMUM NUMBER OF SENSORS
300	300	5,240	9
2400	300	5,240	>120
300	30	10,240	0
2400	30	10,240	6
4800	30	10,240	13

#### 4.2 INTELLIGENT SENSORS

The use of intelligent sensors dramatically improves the performance of the link. Intelligent sensors are assumed to be capable of analyzing their data and determining whether or not the data will be useful to the poller. If they are, they will be transmitted when the sensor is polled. If not, then only a short (240-bit) status message is transmitted. This reduces the link's data load and increases the number of sensors which can be placed in the field before saturation occurs. At the same time, the onset of saturation is virtually impossible to detect. This is because the random nature of the sensors' detections causes a varying load on the link. As more sensors are added, the link drifts in and out of saturation, depending on how many sensors have data at a given time. Thus, there is no point at which the amount of data lost suddenly increases.

The use of intelligent sensors does not reduce the effects of the loss of the link to a competing user. Thus, a certain amount of data will always be lost. This is evident when considering the reduction of lost data as a function of the probability of useful data (or probability of detection). When the probability of detection is 0.9, the intelligent sensors do about 22 percent better than the dumb sensors (1200 series runs versus 100 series runs, and 1600 series runs versus

400 series runs). When the probability of detection is 0.5, the intelligent sensors do 40 to 60 percent better (1100 series versus 100 series, and 1400 series versus 400 series). On the other hand, when the probability of detection is 0.1, the intelligent sensors do only 50 to 70 percent better than the dumb sensors (1300 series versus 100 series, and 1500 series versus 100 series). A much greater improvement is shown as the probability of detection drops from 0.9 to 0.5 than is shown when the probability drops from 0.5 to 0.1. This suggests that link saturation is becoming less of a consideration as the effects of the loss of the link to the competitor become more apparent.

The 1700, 1800, and 1900 series were run to evaluate the effects of requiring the poll to be sent at 300 bps rather than at the same speed at which the sensors transmitted their buffers. This obviously places a greater load on the link, and it should result in more lost messages. This is in fact the case as the 1700 through 1900 series drop 16 to 46 percent more data than the corresponding series with the faster polls (1100 through 1300). Even with the 300 bps polling rate, however, the intelligent sensors outperformed the dumb sensors with the faster poll.

#### 4.3 SENSOR CONTENTION POLLING WITH INTELLIGENT SENSORS

Finally, sensor contention polling was considered. In this scheme, the poller sends out a request for the sensors to indicate whether they have data. The sensors have a number of answer time slots in which to reply if they have data. Each sensor with data picks a slot at random and sends a message asking to be polled. The poller then sends one group poll identifying the sensors which are to respond. The sensors with data then send them one after another.

For this scheme to save time, two things are necessary. First, the sensors must have a low probability of detection, to avoid conflicts between sensors in the answer time slots. Second, there should be a large number of sensors, so the answer slots would take up less time than individual polls would.

In effect, sensor contention could theoretically combine the benefits of intelligent sensors and group polling.

However, sensor contention polling with intelligent sensors do about 55 percent worse than linear polling with intelligent sensors. With a probability of detection of 0.1, the linear polling does better than sensor contention in all runs except those involving 20 sensors with the 10,240-bit, 30-second buffer transmitting at 4800 bps; with a probability of detection of 0.5, the linear polling series does better in all cases.

#### 4.4 OVERALL CONCLUSIONS

The most effective method of improving link performance is to use intelligent sensors. If dumb sensors must be used, group polling provides an advantage over linear polling. Sensor contention, given the constraints of the system, should probably not be considered at all.

Finally, if the large buffer (10,240-bits, 30-second period) is used, a speed faster than 300 bps must be used if any data are to be transferred.



**APPENDIX**  
**COMPUTER MODEL OUTPUT SHEETS**

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MUX LINK SIMULATOR RUN 101 PAGE 1 OF 1. 13:21 20-JUL-78  
DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	22 0 22	0.0000
2	22 0 22	0.0000
3	21 1 22	4.5455
4	21 1 22	4.5455
5	21 1 22	4.5455
TOTAL	107 3 110	2.7273

MUX LINK SIMULATOR RUN 102 PAGE 1 OF 1. 13:24 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	0	22	0.0000
2	22	0	22	0.0000
3	21	1	22	4.5455
4	20	2	22	9.0909
5	20	2	22	9.0909
6	18	4	22	18.1818
7	17	5	22	22.7273
8	17	5	22	22.7273
9	17	5	22	22.7273
10	1	21	22	95.4545
TOTAL	175	45	220	20.4545

MUX LINK SIMULATOR RUN 112 PAGE 1 OF 1. 13:34 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	1	22	4.5455
2	21	1	22	4.5455
3	20	2	22	9.0909
4	19	3	22	13.6364
5	18	4	22	18.1818
6	18	4	22	18.1818
7	17	5	22	22.7273
8	17	5	22	22.7273
9	16	6	22	27.2727
10	0	22	22	100.0000
-----				
TOTAL	167	53	220	24.0909

RUN DATA:

NO OF SENSORS: 30  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	1	22	4.5455
2	21	1	22	4.5455
3	21	1	22	4.5455
4	21	1	22	4.5455
5	21	1	22	4.5455
6	21	1	22	4.5455
7	21	1	22	4.5455
8	21	1	22	4.5455
9	21	1	22	4.5455
10	21	1	22	4.5455
11	21	1	22	4.5455
12	21	1	22	4.5455
13	21	1	22	4.5455
14	21	1	22	4.5455
15	21	1	22	4.5455
16	21	1	22	4.5455
17	21	1	22	4.5455
18	21	1	22	4.5455
19	21	1	22	4.5455
20	21	1	22	4.5455
21	21	1	22	4.5455
22	21	1	22	4.5455
23	21	1	22	4.5455
24	21	1	22	4.5455
25	21	1	22	4.5455
26	21	1	22	4.5455
27	21	1	22	4.5455
28	21	1	22	4.5455
29	21	1	22	4.5455
30	21	1	22	4.5455
TOTAL	630	30	660	4.5455

RUN DATA:  
NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	0	22	0.0000
2	22	0	22	0.0000
3	22	0	22	0.0000
4	22	0	22	0.0000
5	22	0	22	0.0000
6	22	0	22	0.0000
7	22	0	22	0.0000
8	22	0	22	0.0000
9	22	0	22	0.0000
10	22	0	22	0.0000
11	22	0	22	0.0000
12	22	0	22	0.0000
13	22	0	22	0.0000
14	22	0	22	0.0000
15	22	0	22	0.0000
16	22	0	22	0.0000
17	21	1	22	4.5455
18	21	1	22	4.5455
19	21	1	22	4.5455
20	21	1	22	4.5455
21	21	1	22	4.5455
22	21	1	22	4.5455
23	21	1	22	4.5455
24	21	1	22	4.5455
25	21	1	22	4.5455
26	21	1	22	4.5455
27	21	1	22	4.5455
28	21	1	22	4.5455
29	21	1	22	4.5455
30	21	1	22	4.5455

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	21	1	22	4.5455
32	21	1	22	4.5455
33	21	1	22	4.5455
34	21	1	22	4.5455
35	21	1	22	4.5455
36	21	1	22	4.5455
37	21	1	22	4.5455
38	21	1	22	4.5455
39	21	1	22	4.5455
40	21	1	22	4.5455
41	21	1	22	4.5455
42	21	1	22	4.5455
43	21	1	22	4.5455
44	21	1	22	4.5455
45	21	1	22	4.5455
46	21	1	22	4.5455
47	21	1	22	4.5455
48	21	1	22	4.5455
49	21	1	22	4.5455
50	21	1	22	4.5455
51	20	2	22	9.0909
52	20	2	22	9.0909
53	20	2	22	9.0909
54	20	2	22	9.0909
55	20	2	22	9.0909
56	20	2	22	9.0909
57	20	2	22	9.0909
58	20	2	22	9.0909
59	20	2	22	9.0909
60	20	2	22	9.0909



RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	20	2	22	9.0909
62	20	2	22	9.0909
63	20	2	22	9.0909
64	20	2	22	9.0909
65	20	2	22	9.0909
66	20	2	22	9.0909
67	20	2	22	9.0909
68	20	2	22	9.0909
69	20	2	22	9.0909
70	20	2	22	9.0909
71	20	2	22	9.0909
72	20	2	22	9.0909
73	20	2	22	9.0909
74	20	2	22	9.0909
75	20	2	22	9.0909
76	20	2	22	9.0909
77	20	2	22	9.0909
78	20	2	22	9.0909
79	20	2	22	9.0909
80	20	2	22	9.0909
81	20	2	22	9.0909
82	20	2	22	9.0909
83	20	2	22	9.0909
84	20	2	22	9.0909
85	20	2	22	9.0909
86	20	2	22	9.0909
87	20	2	22	9.0909
88	20	2	22	9.0909
89	18	4	22	18.1818
90	18	4	22	18.1818

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	18	4	22	18.1818
92	18	4	22	18.1818
93	18	4	22	18.1818
94	18	4	22	18.1818
95	18	4	22	18.1818
96	18	4	22	18.1818
97	18	4	22	18.1818
98	18	4	22	18.1818
99	18	4	22	18.1818
100	18	4	22	18.1818
101	18	4	22	18.1818
102	18	4	22	18.1818
103	18	4	22	18.1818
104	15	7	22	31.8182
105	10	12	22	54.5455
106	2	20	22	90.9091
107	0	22	22	100.0000
108	0	22	22	100.0000
109	0	22	22	100.0000
110	0	22	22	100.0000
111	0	22	22	100.0000
112	0	22	22	100.0000
113	0	22	22	100.0000
114	0	22	22	100.0000
115	0	22	22	100.0000
116	0	22	22	100.0000
117	0	22	22	100.0000
118	0	22	22	100.0000
119	0	22	22	100.0000
120	0	22	22	100.0000
TOTAL	2123	517	2640	19.5833

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	2	22	9.0909
2	20	2	22	9.0909
3	20	2	22	9.0909
4	20	2	22	9.0909
5	20	2	22	9.0909
6	20	2	22	9.0909
7	20	2	22	9.0909
8	20	2	22	9.0909
9	20	2	22	9.0909
10	20	2	22	9.0909
11	20	2	22	9.0909
12	20	2	22	9.0909
13	20	2	22	9.0909
14	20	2	22	9.0909
15	20	2	22	9.0909
16	20	2	22	9.0909
17	20	2	22	9.0909
18	20	2	22	9.0909
19	20	2	22	9.0909
20	20	2	22	9.0909
21	20	2	22	9.0909
22	20	2	22	9.0909
23	20	2	22	9.0909
24	20	2	22	9.0909
25	20	2	22	9.0909
26	20	2	22	9.0909
27	20	2	22	9.0909
28	20	2	22	9.0909
29	20	2	22	9.0909
30	20	2	22	9.0909

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	20	2	22	9.0909
32	20	2	22	9.0909
33	20	2	22	9.0909
34	20	2	22	9.0909
35	20	2	22	9.0909
36	20	2	22	9.0909
37	20	2	22	9.0909
38	20	2	22	9.0909
39	20	2	22	9.0909
40	20	2	22	9.0909
41	20	2	22	9.0909
42	20	2	22	9.0909
43	20	2	22	9.0909
44	20	2	22	9.0909
45	20	2	22	9.0909
46	20	2	22	9.0909
47	20	2	22	9.0909
48	20	2	22	9.0909
49	20	2	22	9.0909
50	19	3	22	13.6364
51	19	3	22	13.6364
52	19	3	22	13.6364
53	19	3	22	13.6364
54	18	4	22	18.1818
55	18	4	22	18.1818
56	18	4	22	18.1818
57	18	4	22	18.1818
58	18	4	22	18.1818
59	18	4	22	18.1818
60	18	4	22	18.1818

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	18	4	22	18.1818
62	18	4	22	18.1818
63	18	4	22	18.1818
64	18	4	22	18.1818
65	18	4	22	18.1818
66	18	4	22	18.1818
67	17	5	22	22.7273
68	16	6	22	27.2727
69	16	6	22	27.2727
70	15	7	22	31.8182
71	15	7	22	31.8182
72	15	7	22	31.8182
73	15	7	22	31.8182
74	15	7	22	31.8182
75	15	7	22	31.8182
76	15	7	22	31.8182
77	15	7	22	31.8182
78	13	9	22	40.9091
79	13	9	22	40.9091
80	13	9	22	40.9091
81	13	9	22	40.9091
82	13	9	22	40.9091
83	13	9	22	40.9091
84	13	9	22	40.9091
85	13	9	22	40.9091
86	13	9	22	40.9091
87	13	9	22	40.9091
88	13	9	22	40.9091
89	12	10	22	45.4545
90	12	10	22	45.4545

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	12	10	22	45.4545
92	12	10	22	45.4545
93	12	10	22	45.4545
94	12	10	22	45.4545
95	12	10	22	45.4545
96	12	10	22	45.4545
97	12	10	22	45.4545
98	12	10	22	45.4545
99	12	10	22	45.4545
100	12	10	22	45.4545
101	12	10	22	45.4545
102	12	10	22	45.4545
103	12	10	22	45.4545
104	11	11	22	50.0000
105	6	16	22	72.7273
106	0	22	22	100.0000
107	0	22	22	100.0000
108	0	22	22	100.0000
109	0	22	22	100.0000
110	0	22	22	100.0000
111	0	22	22	100.0000
112	0	22	22	100.0000
113	0	22	22	100.0000
114	0	22	22	100.0000
115	0	22	22	100.0000
116	0	22	22	100.0000
117	0	22	22	100.0000
118	0	22	22	100.0000
119	0	22	22	100.0000
120	0	22	22	100.0000
TOTAL	1799	841	2640	31.8561

MUX LINK SIMULATOR RUN 141 PAGE 1 OF 1. 14:23 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	238	238	100.0000
2	0	238	238	100.0000
3	0	238	238	100.0000
4	0	238	238	100.0000
5	0	238	238	100.0000
-----				
TOTAL	0	1190	1190	100.0000

MUX LINK SIMULATOR RUN 161 PAGE 1 OF 1. 14:26 20-JUL-78  
DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:  
NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	150 88 238	36.9748
2	147 91 238	38.2353
3	147 91 238	38.2353
4	145 93 238	39.0756
5	116 122 238	51.2605
TOTAL	705 485 1190	40.7563



MUX LINK SIMULATOR RUN 162 PAGE 1 OF 1. 14:29 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	221	17	238	7.1429
2	220	18	238	7.5630
3	220	18	238	7.5630
4	220	18	238	7.5630
5	174	64	238	26.8908
6	18	220	238	92.4370
7	0	238	238	100.0000
8	0	238	238	100.0000
9	0	238	238	100.0000
10	0	238	238	100.0000
TOTAL	1073	1307	2380	54.9160

MUX LINK SIMULATOR RUN 172 PAGE 1 OF 1. 14:33 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	227	11	238	4.6218
2	226	12	238	5.0420
3	226	12	238	5.0420
4	225	13	238	5.4622
5	176	62	238	26.0504
6	16	222	238	93.2773
7	0	238	238	100.0000
8	0	238	238	100.0000
9	0	238	238	100.0000
10	0	238	238	100.0000
-----				
TOTAL	1096	1284	2380	53.9496

MUX LINK SIMULATOR RUN 182 PAGE 1 OF 1. 14:36 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	232	6	238	2.5210
2	232	6	238	2.5210
3	231	7	238	2.9412
4	231	7	238	2.9412
5	231	7	238	2.9412
6	231	7	238	2.9412
7	231	7	238	2.9412
8	231	7	238	2.9412
9	231	7	238	2.9412
10	231	8	239	3.3473
-----				
TOTAL	2312	69	2381	2.8979

MUX LINK SIMULATOR RUN 184 PAGE 1 OF 1. 14:40 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	229	9	238	3.7815
2	229	9	238	3.7815
3	229	9	238	3.7815
4	229	9	238	3.7815
5	229	9	238	3.7815
6	229	9	238	3.7815
7	229	9	238	3.7815
8	229	9	238	3.7815
9	228	10	238	4.2017
10	228	10	238	4.2017
11	121	117	238	49.1597
12	5	233	238	97.8992
13	0	238	238	100.0000
14	0	238	238	100.0000
15	0	238	238	100.0000
16	0	238	238	100.0000
17	0	238	238	100.0000
18	0	238	238	100.0000
19	0	238	238	100.0000
20	0	238	238	100.0000
TOTAL	2414	2346	4760	49.2857

MUX LINK SIMULATOR RUN 194 PAGE 1 OF 1. 14:44 20-JUL-78  
 DUMB SENSORS, LINEAR POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	215	23	238	9.6639
2	214	24	238	10.0840
3	214	24	238	10.0840
4	212	26	238	10.9244
5	211	27	238	11.3445
6	211	27	238	11.3445
7	210	28	238	11.7647
8	209	29	238	12.1849
9	207	31	238	13.0252
10	206	32	238	13.4454
11	108	130	238	54.6218
12	5	233	238	97.8992
13	0	238	238	100.0000
14	0	238	238	100.0000
15	0	238	238	100.0000
16	0	238	238	100.0000
17	0	238	238	100.0000
18	0	238	238	100.0000
19	0	238	238	100.0000
20	0	238	238	100.0000
TOTAL	2222	2538	4760	53.3193

MUX LINK SIMULATOR RUN 201 PAGE 1 OF 1. 20:31 7-AUG-78  
DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA: -

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR.	-----	MESSAGES-----		PERCENT
NUMBER	SENT	DROPPED	TOTAL	DROPPED
1	23	1	24	4.1667
2	23	1	24	4.1667
3	23	1	24	4.1667
4	23	1	24	4.1667
5	23	1	24	4.1667
	-----	-----	-----	-----
TOTAL	115	5	120	4.1667

MUX LINK SIMULATOR RUN 202 PAGE 1 OF 1. 20:33 7-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	3	24	12.5000
2	20	3	23	13.0435
3	21	2	23	8.6957
4	18	5	23	21.7391
5	19	4	23	17.3913
6	20	3	23	13.0435
7	17	6	23	26.0870
8	22	1	23	4.3478
9	21	2	23	8.6957
10	21	2	23	8.6957
TOTAL	200	31	231	13.4199

MUX LINK SIMULATOR RUN 212 PAGE 1 OF 1. 20:37 7-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	4	24	16.6667
2	17	6	23	26.0870
3	16	7	23	30.4348
4	18	5	23	21.7391
5	19	4	23	17.3913
6	19	4	23	17.3913
7	18	5	23	21.7391
8	18	5	23	21.7391
9	18	5	23	21.7391
10	18	5	23	21.7391
TOTAL	181	50	231	21.6450



MUX LINK SIMULATOR RUN 225 PAGE 1 OF 1. 20:41 7-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	1	24	4.1667
2	23	1	24	4.1667
3	23	1	24	4.1667
4	22	2	24	8.3333
5	22	2	24	8.3333
6	23	1	24	4.1667
7	23	1	24	4.1667
8	23	1	24	4.1667
9	23	1	24	4.1667
10	23	1	24	4.1667
11	23	1	24	4.1667
12	23	1	24	4.1667
13	23	1	24	4.1667
14	23	1	24	4.1667
15	23	1	24	4.1667
16	23	1	24	4.1667
17	23	1	24	4.1667
18	23	1	24	4.1667
19	23	1	24	4.1667
20	23	1	24	4.1667
21	23	1	24	4.1667
22	23	1	24	4.1667
23	23	1	24	4.1667
24	23	1	24	4.1667
25	23	1	24	4.1667
26	23	1	24	4.1667
27	23	1	24	4.1667
28	23	1	24	4.1667
29	23	1	24	4.1667
30	23	1	24	4.1667
TOTAL	688	32	720	4.4444

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	18	5	23	21.7391
2	20	3	23	13.0435
3	21	2	23	8.6957
4	21	2	23	8.6957
5	19	4	23	17.3913
6	21	2	23	8.6957
7	20	3	23	13.0435
8	19	4	23	17.3913
9	21	2	23	8.6957
10	20	3	23	13.0435
11	19	4	23	17.3913
12	19	4	23	17.3913
13	21	2	23	8.6957
14	20	3	23	13.0435
15	21	2	23	8.6957
16	21	2	23	8.6957
17	18	5	23	21.7391
18	19	4	23	17.3913
19	19	4	23	17.3913
20	19	4	23	17.3913
21	20	3	23	13.0435
22	22	1	23	4.3478
23	20	3	23	13.0435
24	20	3	23	13.0435
25	20	3	23	13.0435
26	19	4	23	17.3913
27	20	3	23	13.0435
28	21	2	23	8.6957
29	20	3	23	13.0435
30	19	4	23	17.3913

MUX LINK SIMULATOR RUN 228 PAGE 2 OF 4. 20:45 7-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	20	3	23	13.0435
32	20	3	23	13.0435
33	21	2	23	8.6957
34	21	2	23	8.6957
35	20	3	23	13.0435
36	19	4	23	17.3913
37	19	4	23	17.3913
38	19	4	23	17.3913
39	19	4	23	17.3913
40	21	2	23	8.6957
41	21	2	23	8.6957
42	20	3	23	13.0435
43	20	3	23	13.0435
44	18	5	23	21.7391
45	19	4	23	17.3913
46	20	3	23	13.0435
47	22	1	23	4.3478
48	20	3	23	13.0435
49	21	2	23	8.6957
50	19	4	23	17.3913
51	19	4	23	17.3913
52	20	3	23	13.0435
53	21	2	23	8.6957
54	20	3	23	13.0435
55	19	4	23	17.3913
56	20	3	23	13.0435
57	18	5	23	21.7391
58	20	3	23	13.0435
59	19	4	23	17.3913
60	19	4	23	17.3913

MUX LINK SIMULATOR RUN 228 PAGE 3 OF 4. 20:45 7-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	18	5	23	21.7391
62	18	5	23	21.7391
63	18	5	23	21.7391
64	18	5	23	21.7391
65	21	2	23	8.6957
66	20	3	23	13.0435
67	20	3	23	13.0435
68	19	4	23	17.3913
69	18	5	23	21.7391
70	18	5	23	21.7391
71	19	4	23	17.3913
72	20	3	23	13.0435
73	19	4	23	17.3913
74	19	4	23	17.3913
75	19	4	23	17.3913
76	19	4	23	17.3913
77	19	4	23	17.3913
78	20	3	23	13.0435
79	20	3	23	13.0435
80	18	5	23	21.7391
81	19	4	23	17.3913
82	18	5	23	21.7391
83	19	4	23	17.3913
84	20	3	23	13.0435
85	20	3	23	13.0435
86	18	5	23	21.7391
87	18	5	23	21.7391
88	18	5	23	21.7391
89	18	5	23	21.7391
90	21	2	23	8.6957

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	20	3	23	13.0435
92	21	2	23	8.6957
93	18	5	23	21.7391
94	18	5	23	21.7391
95	17	6	23	26.0870
96	19	4	23	17.3913
97	21	2	23	8.6957
98	19	4	23	17.3913
99	21	2	23	8.6957
100	19	4	23	17.3913
101	20	3	23	13.0435
102	19	4	23	17.3913
103	20	3	23	13.0435
104	21	2	23	8.6957
105	20	3	23	13.0435
106	19	4	23	17.3913
107	19	4	23	17.3913
108	21	2	23	8.6957
109	19	4	23	17.3913
110	22	1	23	4.3478
111	20	3	23	13.0435
112	18	5	23	21.7391
113	18	5	23	21.7391
114	18	5	23	21.7391
115	19	4	23	17.3913
116	18	5	23	21.7391
117	21	2	23	8.6957
118	18	5	23	21.7391
119	19	4	23	17.3913
120	19	4	23	17.3913
TOTAL	2341	419	2760	15.1812

MUX LINK SIMULATOR RUN 238 PAGE 1 OF 4. 20:59 7-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	15	8	23	34.7826
2	16	7	23	30.4348
3	15	8	23	34.7826
4	16	7	23	30.4348
5	15	8	23	34.7826
6	16	7	23	30.4348
7	15	8	23	34.7826
8	15	8	23	34.7826
9	16	7	23	30.4348
10	15	8	23	34.7826
11	16	7	23	30.4348
12	14	9	23	39.1304
13	16	7	23	30.4348
14	16	7	23	30.4348
15	16	7	23	30.4348
16	16	7	23	30.4348
17	15	8	23	34.7826
18	16	7	23	30.4348
19	16	7	23	30.4348
20	16	7	23	30.4348
21	16	7	23	30.4348
22	16	7	23	30.4348
23	14	9	23	39.1304
24	15	8	23	34.7826
25	16	7	23	30.4348
26	16	7	23	30.4348
27	17	6	23	26.0870
28	16	7	23	30.4348
29	17	6	23	26.0870
30	15	8	23	34.7826

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	17	6	23	26.0870
32	17	6	23	26.0870
33	17	6	23	26.0870
34	18	5	23	21.7391
35	16	7	23	30.4348
36	16	7	23	30.4348
37	17	6	23	26.0870
38	19	4	23	17.3913
39	18	5	23	21.7391
40	19	4	23	17.3913
41	18	5	23	21.7391
42	15	8	23	34.7826
43	16	7	23	30.4348
44	17	6	23	26.0870
45	18	5	23	21.7391
46	17	6	23	26.0870
47	19	4	23	17.3913
48	17	6	23	26.0870
49	17	6	23	26.0870
50	18	5	23	21.7391
51	18	5	23	21.7391
52	19	4	23	17.3913
53	18	5	23	21.7391
54	18	5	23	21.7391
55	15	8	23	34.7826
56	17	6	23	26.0870
57	17	6	23	26.0870
58	17	6	23	26.0870
59	18	5	23	21.7391
60	17	6	23	26.0870

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	17	6	23	26.0870
62	16	7	23	30.4348
63	19	4	23	17.3913
64	18	5	23	21.7391
65	19	4	23	17.3913
66	17	6	23	26.0870
67	16	7	23	30.4348
68	16	7	23	30.4348
69	16	7	23	30.4348
70	17	6	23	26.0870
71	17	6	23	26.0870
72	18	5	23	21.7391
73	16	7	23	30.4348
74	16	7	23	30.4348
75	16	7	23	30.4348
76	16	7	23	30.4348
77	15	8	23	34.7826
78	15	8	23	34.7826
79	16	7	23	30.4348
80	14	9	23	39.1304
81	16	7	23	30.4348
82	15	8	23	34.7826
83	16	7	23	30.4348
84	15	8	23	34.7826
85	15	8	23	34.7826
86	15	8	23	34.7826
87	16	7	23	30.4348
88	17	6	23	26.0870
89	16	7	23	30.4348
90	17	6	23	26.0870



RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	16	7	23	30.4348
92	15	8	23	34.7826
93	15	8	23	34.7826
94	15	8	23	34.7826
95	17	6	23	26.0870
96	14	9	23	39.1304
97	16	7	23	30.4348
98	15	8	23	34.7826
99	16	7	23	30.4348
100	16	7	23	30.4348
101	16	7	23	30.4348
102	16	7	23	30.4348
103	16	7	23	30.4348
104	15	8	23	34.7826
105	14	9	23	39.1304
106	15	8	23	34.7826
107	14	9	23	39.1304
108	15	8	23	34.7826
109	14	9	23	39.1304
110	14	9	23	39.1304
111	14	9	23	39.1304
112	14	9	23	39.1304
113	14	9	23	39.1304
114	14	9	23	39.1304
115	15	8	23	34.7826
116	15	8	23	34.7826
117	15	8	23	34.7826
118	14	9	23	39.1304
119	13	10	23	43.4783
120	15	8	23	34.7826
TOTAL	1924	836	2760	30.2899

MUX LINK SIMULATOR RUN 241 PAGE 1 OF 1. 14:53 8-AUG-78  
DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	0 239 239	100.0000
2	0 239 239	100.0000
3	0 239 239	100.0000
4	0 239 239	100.0000
5	0 239 239	100.0000
TOTAL	0 1195 1195	100.0000

MUX LINK SIMULATOR RUN 261 PAGE 1 OF 1. 14:56 8-AUG-78  
DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	231 9 240	3.7500
2	230 10 240	4.1667
3	231 9 240	3.7500
4	230 10 240	4.1667
5	230 10 240	4.1667
-----		
TOTAL	1152 48 1200	4.0000

MUX LINK SIMULATOR RUN 262 PAGE 1 OF 1. 14:58 8-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	116	123	239	51.4644
2	118	121	239	50.6276
3	122	117	239	48.9540
4	117	122	239	51.0460
5	119	120	239	50.2092
6	118	121	239	50.6276
7	114	125	239	52.3013
8	116	123	239	51.4644
9	118	121	239	50.6276
10	118	121	239	50.6276
-----				
TOTAL	1176	1214	2390	50.7950

MUX LINK SIMULATOR RUN 272 PAGE 1 OF 1. 15:01 8-AUG-78  
DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	125 114 239	47.6987
2	129 110 239	46.0251
3	125 114 239	47.6987
4	125 114 239	47.6987
5	124 115 239	48.1172
6	123 116 239	48.5356
7	125 114 239	47.6987
8	127 112 239	46.8619
9	127 112 239	46.8619
10	125 114 239	47.6987
TOTAL	----- 1255 1135 2390	----- 47.4895

MUX LINK SIMULATOR RUN 282 PAGE 1 OF 1. 15:04 8-AUG-78  
DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 4800 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	224 16 240	6.6667
2	224 16 240	6.6667
3	224 16 240	6.6667
4	222 18 240	7.5000
5	223 17 240	7.0833
6	223 17 240	7.0833
7	224 16 240	6.6667
8	224 16 240	6.6667
9	224 16 240	6.6667
10	223 16 239	6.6946
TOTAL	2235 164 2399	6.8362

MUX LINK SIMULATOR RUN 284 PAGE 1 OF 1. 15:07 8-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	108	131	239	54.8117
2	101	138	239	57.7406
3	103	136	239	56.9038
4	107	132	239	55.2301
5	99	140	239	58.5774
6	109	130	239	54.3933
7	100	139	239	58.1590
8	108	131	239	54.8117
9	100	139	239	58.1590
10	109	130	239	54.3933
11	103	136	239	56.9038
12	105	134	239	56.0669
13	104	135	239	56.4854
14	105	134	239	56.0669
15	106	133	239	55.6485
16	103	136	239	56.9038
17	112	127	239	53.1381
18	100	139	239	58.1590
19	110	129	239	53.9749
20	99	140	239	58.5774
TOTAL	2091	2689	4780	56.2552

MUX LINK SIMULATOR RUN 294 PAGE 1 OF 1. 15:11 8-AUG-78  
 DUMB SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	129	111	240	46.2500
2	134	105	239	43.9331
3	130	109	239	45.6067
4	134	105	239	43.9331
5	127	112	239	46.8619
6	132	107	239	44.7699
7	131	108	239	45.1883
8	134	105	239	43.9331
9	129	110	239	46.0251
10	132	107	239	44.7699
11	132	107	239	44.7699
12	133	106	239	44.3515
13	131	108	239	45.1883
14	129	110	239	46.0251
15	132	107	239	44.7699
16	132	107	239	44.7699
17	130	109	239	45.6067
18	132	107	239	44.7699
19	133	106	239	44.3515
20	134	105	239	43.9331
TOTAL	2630	2151	4781	44.9906



MUX LINK SIMULATOR RUN 301 PAGE 1 OF 1. 17:48 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	23	1	24	4.1667
2	23	1	24	4.1667
3	23	1	24	4.1667
4	23	1	24	4.1667
5	22	2	24	8.3333
-----				
TOTAL	114	6	120	5.0000

MUX LINK SIMULATOR RUN 302 PAGE 1 OF 1. 17:50 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	21	3	24	12.5000
2	19	4	23	17.3913
3	21	2	23	8.6957
4	21	2	23	8.6957
5	20	3	23	13.0435
6	19	4	23	17.3913
7	19	4	23	17.3913
8	18	5	23	21.7391
9	18	5	23	21.7391
10	21	2	23	8.6957
TOTAL	197	34	231	14.7186

MUX LINK SIMULATOR RUN 312 PAGE 1 OF 1. 17:56 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	19 5 24	20.8333
2	19 4 23	17.3913
3	19 4 23	17.3913
4	19 4 23	17.3913
5	17 6 23	26.0870
6	19 4 23	17.3913
7	19 4 23	17.3913
8	17 6 23	26.0870
9	19 4 23	17.3913
10	20 3 23	13.0435
-----		
TOTAL	187 44 231	19.0476

MUX LINK SIMULATOR RUN 325 PAGE 1 OF 1. 18:02 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	1	24	4.1667
2	23	1	24	4.1667
3	23	1	24	4.1667
4	23	1	24	4.1667
5	23	1	24	4.1667
6	23	1	24	4.1667
7	23	1	24	4.1667
8	23	1	24	4.1667
9	23	1	24	4.1667
10	23	1	24	4.1667
11	23	1	24	4.1667
12	23	1	24	4.1667
13	23	1	24	4.1667
14	23	1	24	4.1667
15	23	1	24	4.1667
16	23	1	24	4.1667
17	23	1	24	4.1667
18	23	1	24	4.1667
19	23	1	24	4.1667
20	23	1	24	4.1667
21	23	1	24	4.1667
22	23	1	24	4.1667
23	23	1	24	4.1667
24	23	1	24	4.1667
25	22	1	23	4.3478
26	22	1	23	4.3478
27	22	1	23	4.3478
28	22	1	23	4.3478
29	22	1	23	4.3478
30	22	1	23	4.3478
TOTAL	----- 684	----- 30	----- 714	----- 4.2017

MUX LINK SIMULATOR RUN 328 PAGE 1 OF 4. 18:06 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	19	5	24	20.8333
2	19	5	24	20.8333
3	19	5	24	20.8333
4	19	5	24	20.8333
5	19	5	24	20.8333
6	20	4	24	16.6667
7	20	4	24	16.6667
8	20	4	24	16.6667
9	20	4	24	16.6667
10	20	4	24	16.6667
11	20	4	24	16.6667
12	20	4	24	16.6667
13	20	4	24	16.6667
14	20	4	24	16.6667
15	20	4	24	16.6667
16	20	4	24	16.6667
17	20	4	24	16.6667
18	20	4	24	16.6667
19	20	4	24	16.6667
20	19	5	24	20.8333
21	19	5	24	20.8333
22	19	5	24	20.8333
23	19	5	24	20.8333
24	19	5	24	20.8333
25	19	5	24	20.8333
26	19	5	24	20.8333
27	19	5	24	20.8333
28	19	5	24	20.8333
29	19	5	24	20.8333
30	19	5	24	20.8333

MUX LINK SIMULATOR RUN 328 PAGE 2 OF 4. 18:06 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	19	5	24	20.8333
32	20	4	24	16.6667
33	21	3	24	12.5000
34	21	3	24	12.5000
35	21	3	24	12.5000
36	20	3	23	13.0435
37	20	3	23	13.0435
38	20	3	23	13.0435
39	20	3	23	13.0435
40	20	3	23	13.0435
41	20	3	23	13.0435
42	20	3	23	13.0435
43	20	3	23	13.0435
44	20	3	23	13.0435
45	20	3	23	13.0435
46	21	2	23	8.6957
47	21	2	23	8.6957
48	21	2	23	8.6957
49	21	2	23	8.6957
50	21	2	23	8.6957
51	21	2	23	8.6957
52	21	2	23	8.6957
53	21	2	23	8.6957
54	21	2	23	8.6957
55	21	2	23	8.6957
56	21	2	23	8.6957
57	21	2	23	8.6957
58	21	2	23	8.6957
59	21	2	23	8.6957
60	21	2	23	8.6957

RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	21	2	23	8.6957
62	21	2	23	8.6957
63	21	2	23	8.6957
64	21	2	23	8.6957
65	21	2	23	8.6957
66	20	3	23	13.0435
67	20	3	23	13.0435
68	20	3	23	13.0435
69	20	3	23	13.0435
70	20	3	23	13.0435
71	20	3	23	13.0435
72	20	3	23	13.0435
73	20	3	23	13.0435
74	20	3	23	13.0435
75	20	3	23	13.0435
76	20	3	23	13.0435
77	20	3	23	13.0435
78	20	3	23	13.0435
79	20	3	23	13.0435
80	20	3	23	13.0435
81	20	3	23	13.0435
82	19	4	23	17.3913
83	19	4	23	17.3913
84	19	4	23	17.3913
85	19	4	23	17.3913
86	19	4	23	17.3913
87	19	4	23	17.3913
88	18	5	23	21.7391
89	18	5	23	21.7391
90	18	5	23	21.7391

MUX LINK SIMULATOR RUN 328 PAGE 4 OF 4. 18:06 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	18	5	23	21.7391
92	18	5	23	21.7391
93	18	5	23	21.7391
94	18	5	23	21.7391
95	18	5	23	21.7391
96	18	5	23	21.7391
97	18	5	23	21.7391
98	18	5	23	21.7391
99	18	5	23	21.7391
100	18	5	23	21.7391
101	18	5	23	21.7391
102	18	5	23	21.7391
103	18	5	23	21.7391
104	18	5	23	21.7391
105	18	5	23	21.7391
106	18	5	23	21.7391
107	18	5	23	21.7391
108	18	5	23	21.7391
109	18	5	23	21.7391
110	18	5	23	21.7391
111	18	5	23	21.7391
112	18	5	23	21.7391
113	18	5	23	21.7391
114	18	5	23	21.7391
115	18	5	23	21.7391
116	18	5	23	21.7391
117	19	4	23	17.3913
118	19	4	23	17.3913
119	19	4	23	17.3913
120	18	5	23	21.7391
TOTAL	2337	458	2795	16.3864



MUX LINK SIMULATOR RUN 338 PAGE 1 OF 4. 18:20 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	3	24	12.5000
2	21	3	24	12.5000
3	22	2	24	8.3333
4	22	2	24	8.3333
5	22	2	24	8.3333
6	22	2	24	8.3333
7	22	2	24	8.3333
8	22	2	24	8.3333
9	22	2	24	8.3333
10	22	2	24	8.3333
11	22	2	24	8.3333
12	22	2	24	8.3333
13	22	2	24	8.3333
14	22	2	24	8.3333
15	22	2	24	8.3333
16	22	2	24	8.3333
17	21	2	23	8.6957
18	22	1	23	4.3478
19	22	1	23	4.3478
20	22	1	23	4.3478
21	22	1	23	4.3478
22	22	1	23	4.3478
23	22	1	23	4.3478
24	22	1	23	4.3478
25	22	1	23	4.3478
26	22	1	23	4.3478
27	22	1	23	4.3478
28	22	1	23	4.3478
29	22	1	23	4.3478
30	22	1	23	4.3478

MUX LINK SIMULATOR RUN 338 PAGE 2 OF 4. 18:20 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	22	1	23	4.3478
32	22	1	23	4.3478
33	22	1	23	4.3478
34	22	1	23	4.3478
35	22	1	23	4.3478
36	22	1	23	4.3478
37	22	1	23	4.3478
38	22	1	23	4.3478
39	22	1	23	4.3478
40	22	1	23	4.3478
41	22	1	23	4.3478
42	22	1	23	4.3478
43	22	1	23	4.3478
44	22	1	23	4.3478
45	22	1	23	4.3478
46	22	1	23	4.3478
47	22	1	23	4.3478
48	22	1	23	4.3478
49	22	1	23	4.3478
50	22	1	23	4.3478
51	22	1	23	4.3478
52	22	1	23	4.3478
53	22	1	23	4.3478
54	22	1	23	4.3478
55	22	1	23	4.3478
56	22	1	23	4.3478
57	22	1	23	4.3478
58	22	1	23	4.3478
59	22	1	23	4.3478
60	22	1	23	4.3478

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	21	2	23	8.6957
62	21	2	23	8.6957
63	21	2	23	8.6957
64	21	2	23	8.6957
65	21	2	23	8.6957
66	21	2	23	8.6957
67	21	2	23	8.6957
68	21	2	23	8.6957
69	21	2	23	8.6957
70	21	2	23	8.6957
71	21	2	23	8.6957
72	21	2	23	8.6957
73	21	2	23	8.6957
74	21	2	23	8.6957
75	21	2	23	8.6957
76	22	1	23	4.3478
77	22	1	23	4.3478
78	22	1	23	4.3478
79	22	1	23	4.3478
80	22	1	23	4.3478
81	22	1	23	4.3478
82	22	1	23	4.3478
83	22	1	23	4.3478
84	22	1	23	4.3478
85	22	1	23	4.3478
86	22	1	23	4.3478
87	22	1	23	4.3478
88	22	1	23	4.3478
89	22	1	23	4.3478
90	22	1	23	4.3478

MUX LINK SIMULATOR RUN 338 PAGE 4 OF 4. 18:20 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	22	1	23	4.3478
92	22	1	23	4.3478
93	22	1	23	4.3478
94	22	1	23	4.3478
95	22	1	23	4.3478
96	22	1	23	4.3478
97	22	1	23	4.3478
98	22	1	23	4.3478
99	22	1	23	4.3478
100	22	1	23	4.3478
101	22	1	23	4.3478
102	22	1	23	4.3478
103	22	1	23	4.3478
104	21	2	23	8.6957
105	21	2	23	8.6957
106	21	2	23	8.6957
107	21	2	23	8.6957
108	21	2	23	8.6957
109	21	2	23	8.6957
110	21	2	23	8.6957
111	21	2	23	8.6957
112	21	2	23	8.6957
113	21	2	23	8.6957
114	21	2	23	8.6957
115	21	2	23	8.6957
116	21	2	23	8.6957
117	21	2	23	8.6957
118	21	2	23	8.6957
119	21	2	23	8.6957
120	21	2	23	8.6957
TOTAL	2605	171	2776	6.1599

MUX LINK SIMULATOR RUN 341 PAGE 1 OF 1. 18:33 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	0	239	239	100.0000
2	0	239	239	100.0000
3	0	239	239	100.0000
4	0	239	239	100.0000
5	0	239	239	100.0000
-----				
TOTAL	0	1195	1195	100.0000

MUX LINK SIMULATOR RUN 361 PAGE 1 OF 1. 18:35 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	193 47 240	19.5833
2	192 48 240	20.0000
3	192 48 240	20.0000
4	190 50 240	20.8333
5	193 47 240	19.5833
TOTAL	960 240 1200	20.0000

-----  
MUX LINK SIMULATOR RUN 362 PAGE 1 OF 1. 18:42 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	134	105	239	43.9331
2	134	105	239	43.9331
3	134	105	239	43.9331
4	134	105	239	43.9331
5	134	105	239	43.9331
6	132	107	239	44.7699
7	133	106	239	44.3515
8	136	103	239	43.0962
9	134	105	239	43.9331
10	133	106	239	44.3515
TOTAL	1338	1052	2390	44.0167

MUX LINK SIMULATOR RUN 372 PAGE 1 OF 1. 18:44 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	128	112	240	46.6667
2	128	111	239	46.4435
3	130	109	239	45.6067
4	127	112	239	46.8619
5	132	107	239	44.7699
6	133	106	239	44.3515
7	131	108	239	45.1883
8	132	107	239	44.7699
9	131	108	239	45.1883
10	128	111	239	46.4435
	-----	-----	-----	-----
TOTAL	1300	1091	2391	45.6294



MUX LINK SIMULATOR RUN 382 PAGE 1 OF 1. 18:50 8-AUG-78  
DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 4800 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	232	8	240	3.3333
2	232	8	240	3.3333
3	232	8	240	3.3333
4	233	7	240	2.9167
5	233	7	240	2.9167
6	233	7	240	2.9167
7	233	7	240	2.9167
8	233	7	240	2.9167
9	233	7	240	2.9167
10	233	7	240	2.9167
TOTAL	----- 2327	----- 73	----- 2400	----- 3.0417

MUX LINK SIMULATOR RUN 384 PAGE 1 OF 1. 18:53 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	130	109	239	45.6067
2	133	106	239	44.3515
3	130	109	239	45.6067
4	132	107	239	44.7699
5	134	105	239	43.9331
6	131	108	239	45.1883
7	136	103	239	43.0962
8	130	109	239	45.6067
9	135	104	239	43.5146
10	130	109	239	45.6067
11	131	108	239	45.1883
12	130	109	239	45.6067
13	126	113	239	47.2803
14	131	108	239	45.1883
15	131	108	239	45.1883
16	129	110	239	46.0251
17	136	103	239	43.0962
18	132	107	239	44.7699
19	131	108	239	45.1883
20	135	104	239	43.5146
-----				
TOTAL	2633	2147	4780	44.9163

MUX LINK SIMULATOR RUN 394 PAGE 1 OF 1. 18:57 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, EVEN INTERVAL TURNON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	143	96	239	40.1674
2	145	94	239	39.3305
3	142	97	239	40.5858
4	143	96	239	40.1674
5	147	92	239	38.4937
6	142	97	239	40.5858
7	147	92	239	38.4937
8	148	91	239	38.0753
9	145	94	239	39.3305
10	147	92	239	38.4937
11	144	95	239	39.7490
12	141	98	239	41.0042
13	145	94	239	39.3305
14	144	95	239	39.7490
15	142	97	239	40.5858
16	147	92	239	38.4937
17	143	96	239	40.1674
18	143	96	239	40.1674
19	146	93	239	38.9121
20	143	96	239	40.1674
TOTAL	2887	1893	4780	39.6025

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	0	23	0.0000
2	23	0	23	0.0000
3	22	1	23	4.3478
4	22	1	23	4.3478
5	22	1	23	4.3478
-----				
TOTAL	112	3	115	2.6087

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MUX LINK SIMULATOR RUN 402 PAGE 1 OF 1. 19:33 8-AUG-78  
DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	0	23	0.0000
2	23	0	23	0.0000
3	22	1	23	4.3478
4	22	1	23	4.3478
5	22	1	23	4.3478
6	22	1	23	4.3478
7	21	2	23	8.6957
8	20	3	23	13.0435
9	20	3	23	13.0435
10	2	20	22	90.9091
-----				
TOTAL	197	32	229	13.9738

MUX LINK SIMULATOR RUN 412 PAGE 1 OF 1. 19:35 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	23	0	23	0.0000
2	23	0	23	0.0000
3	22	1	23	4.3478
4	21	2	23	8.6957
5	21	2	23	8.6957
6	19	4	23	17.3913
7	18	5	23	21.7391
8	18	5	23	21.7391
9	18	5	23	21.7391
10	1	21	22	95.4545
-----				
TOTAL	184	45	229	19.6507

RUN DATA:

NO OF SENSORS: 30  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	0	23	0.0000
2	23	0	23	0.0000
3	23	0	23	0.0000
4	23	0	23	0.0000
5	23	0	23	0.0000
6	23	0	23	0.0000
7	23	0	23	0.0000
8	23	0	23	0.0000
9	23	0	23	0.0000
10	23	0	23	0.0000
11	23	0	23	0.0000
12	23	0	23	0.0000
13	23	0	23	0.0000
14	23	0	23	0.0000
15	23	0	23	0.0000
16	23	0	23	0.0000
17	23	0	23	0.0000
18	23	0	23	0.0000
19	23	0	23	0.0000
20	23	0	23	0.0000
21	23	0	23	0.0000
22	23	0	23	0.0000
23	23	0	23	0.0000
24	23	0	23	0.0000
25	23	0	23	0.0000
26	23	0	23	0.0000
27	23	0	23	0.0000
28	23	0	23	0.0000
29	23	0	23	0.0000
30	23	0	23	0.0000
TOTAL	690	0	690	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	1	23	4.3478
2	22	1	23	4.3478
3	22	1	23	4.3478
4	22	1	23	4.3478
5	22	1	23	4.3478
6	22	1	23	4.3478
7	22	1	23	4.3478
8	22	1	23	4.3478
9	22	1	23	4.3478
10	22	1	23	4.3478
11	22	1	23	4.3478
12	22	1	23	4.3478
13	22	1	23	4.3478
14	22	1	23	4.3478
15	22	1	23	4.3478
16	22	1	23	4.3478
17	22	1	23	4.3478
18	22	1	23	4.3478
19	22	1	23	4.3478
20	22	1	23	4.3478
21	22	1	23	4.3478
22	22	1	23	4.3478
23	22	1	23	4.3478
24	22	1	23	4.3478
25	22	1	23	4.3478
26	22	1	23	4.3478
27	22	1	23	4.3478
28	22	1	23	4.3478
29	22	1	23	4.3478
30	22	1	23	4.3478



RUN DATA:

NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	22	1	23	4.3478
32	22	1	23	4.3478
33	22	1	23	4.3478
34	22	1	23	4.3478
35	22	1	23	4.3478
36	22	1	23	4.3478
37	22	1	23	4.3478
38	22	1	23	4.3478
39	22	1	23	4.3478
40	22	1	23	4.3478
41	21	2	23	8.6957
42	21	2	23	8.6957
43	21	2	23	8.6957
44	21	2	23	8.6957
45	21	2	23	8.6957
46	20	3	23	13.0435
47	20	3	23	13.0435
48	20	3	23	13.0435
49	20	3	23	13.0435
50	20	3	23	13.0435
51	20	3	23	13.0435
52	20	3	23	13.0435
53	20	3	23	13.0435
54	20	3	23	13.0435
55	20	3	23	13.0435
56	20	3	23	13.0435
57	20	3	23	13.0435
58	20	3	23	13.0435
59	20	3	23	13.0435
60	19	4	23	17.3913

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	19	4	23	17.3913
62	19	4	23	17.3913
63	19	4	23	17.3913
64	19	4	23	17.3913
65	19	4	23	17.3913
66	19	4	23	17.3913
67	19	4	23	17.3913
68	19	4	23	17.3913
69	19	4	23	17.3913
70	19	4	23	17.3913
71	19	4	23	17.3913
72	19	4	23	17.3913
73	19	4	23	17.3913
74	19	4	23	17.3913
75	19	4	23	17.3913
76	19	4	23	17.3913
77	19	4	23	17.3913
78	19	4	23	17.3913
79	19	4	23	17.3913
80	19	4	23	17.3913
81	19	4	23	17.3913
82	19	4	23	17.3913
83	19	4	23	17.3913
84	18	5	23	21.7391
85	18	5	23	21.7391
86	18	5	23	21.7391
87	18	5	23	21.7391
88	18	5	23	21.7391
89	18	5	23	21.7391
90	18	5	23	21.7391

MUX LINK SIMULATOR RUN 428 PAGE 4 OF 4. 19:42 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	18	5	23	21.7391
92	18	5	23	21.7391
93	18	5	23	21.7391
94	18	5	23	21.7391
95	18	5	23	21.7391
96	18	5	23	21.7391
97	18	5	23	21.7391
98	18	5	23	21.7391
99	18	5	23	21.7391
100	18	5	23	21.7391
101	18	5	23	21.7391
102	18	5	23	21.7391
103	17	6	23	26.0870
104	17	6	23	26.0870
105	17	6	23	26.0870
106	17	6	23	26.0870
107	17	6	23	26.0870
108	17	6	23	26.0870
109	17	6	23	26.0870
110	17	6	23	26.0870
111	17	6	23	26.0870
112	17	6	23	26.0870
113	17	6	23	26.0870
114	17	6	23	26.0870
115	17	6	23	26.0870
116	17	6	23	26.0870
117	17	6	23	26.0870
118	17	6	23	26.0870
119	16	7	23	30.4348
120	16	7	23	30.4348
-----				
TOTAL	2367	393	2760	14.2391

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	1	23	4.3478
2	22	1	23	4.3478
3	22	1	23	4.3478
4	22	1	23	4.3478
5	22	1	23	4.3478
6	22	1	23	4.3478
7	22	1	23	4.3478
8	22	1	23	4.3478
9	22	1	23	4.3478
10	22	1	23	4.3478
11	22	1	23	4.3478
12	22	1	23	4.3478
13	22	1	23	4.3478
14	22	1	23	4.3478
15	22	1	23	4.3478
16	22	1	23	4.3478
17	22	1	23	4.3478
18	22	1	23	4.3478
19	22	1	23	4.3478
20	22	1	23	4.3478
21	22	1	23	4.3478
22	22	1	23	4.3478
23	22	1	23	4.3478
24	22	1	23	4.3478
25	22	1	23	4.3478
26	22	1	23	4.3478
27	22	1	23	4.3478
28	22	1	23	4.3478
29	22	1	23	4.3478
30	22	1	23	4.3478

MUX LINK SIMULATOR RUN 438 PAGE 2 OF 4. 19:56 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	22	1	23	4.3478
32	22	1	23	4.3478
33	22	1	23	4.3478
34	22	1	23	4.3478
35	22	1	23	4.3478
36	22	1	23	4.3478
37	22	1	23	4.3478
38	22	1	23	4.3478
39	22	1	23	4.3478
40	22	1	23	4.3478
41	22	1	23	4.3478
42	22	1	23	4.3478
43	22	1	23	4.3478
44	22	1	23	4.3478
45	22	1	23	4.3478
46	22	1	23	4.3478
47	22	1	23	4.3478
48	22	1	23	4.3478
49	22	1	23	4.3478
50	22	1	23	4.3478
51	22	1	23	4.3478
52	22	1	23	4.3478
53	22	1	23	4.3478
54	22	1	23	4.3478
55	22	1	23	4.3478
56	22	1	23	4.3478
57	22	1	23	4.3478
58	22	1	23	4.3478
59	22	1	23	4.3478
60	22	1	23	4.3478

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	22	1	23	4.3478
62	22	1	23	4.3478
63	22	1	23	4.3478
64	22	1	23	4.3478
65	22	1	23	4.3478
66	22	1	23	4.3478
67	22	1	23	4.3478
68	22	1	23	4.3478
69	22	1	23	4.3478
70	22	1	23	4.3478
71	22	1	23	4.3478
72	22	1	23	4.3478
73	22	1	23	4.3478
74	22	1	23	4.3478
75	22	1	23	4.3478
76	22	1	23	4.3478
77	22	1	23	4.3478
78	22	1	23	4.3478
79	22	1	23	4.3478
80	22	1	23	4.3478
81	21	1	22	4.5455
82	21	1	22	4.5455
83	21	1	22	4.5455
84	21	1	22	4.5455
85	21	1	22	4.5455
86	21	1	22	4.5455
87	21	1	22	4.5455
88	21	1	22	4.5455
89	21	1	22	4.5455
90	20	2	22	9.0909

MUX LINK SIMULATOR RUN 438 PAGE 4 OF 4. 19:56 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	20	2	22	9.0909
92	19	3	22	13.6364
93	19	3	22	13.6364
94	19	3	22	13.6364
95	19	3	22	13.6364
96	19	3	22	13.6364
97	19	3	22	13.6364
98	19	3	22	13.6364
99	19	3	22	13.6364
100	19	3	22	13.6364
101	19	3	22	13.6364
102	19	3	22	13.6364
103	19	3	22	13.6364
104	19	3	22	13.6364
105	19	3	22	13.6364
106	19	3	22	13.6364
107	19	3	22	13.6364
108	19	3	22	13.6364
109	19	3	22	13.6364
110	19	3	22	13.6364
111	19	3	22	13.6364
112	19	3	22	13.6364
113	19	3	22	13.6364
114	19	3	22	13.6364
115	19	3	22	13.6364
116	19	3	22	13.6364
117	18	4	22	18.1818
118	17	5	22	22.7273
119	17	5	22	22.7273
120	17	5	22	22.7273
TOTAL	2533	187	2720	6.8750

MUX LINK SIMULATOR RUN 441 PAGE 1 OF 1. .20:09 8-AUG-78  
DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	238	238	100.0000
2	0	238	238	100.0000
3	0	238	238	100.0000
4	0	238	238	100.0000
5	0	238	238	100.0000
-----				
TOTAL	0	1190	1190	100.0000



MUX LINK SIMULATOR RUN 461 PAGE 1 OF 1. 20:12 8-AUG-78  
DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	187	52	239	21.7573
2	181	58	239	24.2678
3	180	59	239	24.6862
4	180	59	239	24.6862
5	144	95	239	39.7490
TOTAL	872	323	1195	27.0293

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	230	9	239	3.7657
2	229	10	239	4.1841
3	229	10	239	4.1841
4	228	11	239	4.6025
5	180	59	239	24.6862
6	32	206	238	86.5546
7	0	238	238	100.0000
8	0	238	238	100.0000
9	0	238	238	100.0000
10	0	238	238	100.0000
TOTAL	1128	1257	2385	52.7044

MUX LINK SIMULATOR RUN 472 PAGE 1 OF 1. 20:18 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	214	25	239	10.4603
2	213	26	239	10.8787
3	211	28	239	11.7155
4	210	29	239	12.1339
5	162	77	239	32.2176
6	29	209	238	87.8151
7	0	238	238	100.0000
8	0	238	238	100.0000
9	0	238	238	100.0000
10	0	238	238	100.0000
-----				
TOTAL	1039	1346	2385	56.4361

MUX LINK SIMULATOR RUN 482 PAGE 1 OF 1. 20:21 8-AUG-78  
DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 4800 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	153 86 239	35.9833
2	151 88 239	36.8201
3	149 90 239	37.6569
4	148 91 239	38.0753
5	148 91 239	38.0753
6	148 91 239	38.0753
7	146 93 239	38.9121
8	146 93 239	38.9121
9	146 93 239	38.9121
10	145 94 239	39.3305
-----		
TOTAL	1480 910 2390	38.0753

RUN DATA:

NO OF SENSORS: 20  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 4800 BPS  
BITS PER POLL: 240  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	222	16	238	6.7227
2	221	17	238	7.1429
3	221	17	238	7.1429
4	220	18	238	7.5630
5	220	18	238	7.5630
6	220	18	238	7.5630
7	220	18	238	7.5630
8	220	18	238	7.5630
9	220	18	238	7.5630
10	220	18	238	7.5630
11	220	18	238	7.5630
12	108	130	238	54.6218
13	18	220	238	92.4370
14	0	238	238	100.0000
15	0	238	238	100.0000
16	0	238	238	100.0000
17	0	238	238	100.0000
18	0	238	238	100.0000
19	0	238	238	100.0000
20	0	238	238	100.0000
TOTAL	2550	2210	4760	46.4286

MUX LINK SIMULATOR RUN 494 PAGE 1 OF 1. 20:29 8-AUG-78  
 DUMB SENSORS, GROUP POLLING, SIMULTANEOUS TURN ON, RANDOM TIME SLOT

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	224	15	239	6.2762
2	224	15	239	6.2762
3	224	15	239	6.2762
4	224	15	239	6.2762
5	224	15	239	6.2762
6	223	16	239	6.6946
7	223	16	239	6.6946
8	222	17	239	7.1130
9	222	17	239	7.1130
10	222	17	239	7.1130
11	222	17	239	7.1130
12	104	135	239	56.4854
13	15	223	238	93.6975
14	0	238	238	100.0000
15	0	238	238	100.0000
16	0	238	238	100.0000
17	0	238	238	100.0000
18	0	238	238	100.0000
19	0	238	238	100.0000
20	0	238	238	100.0000
TOTAL	2573	2199	4772	46.0813

MUX LINK SIMULATOR RUN 1101 PAGE 1 OF 1. 13:03 15-AUG-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PRPB. OF TGT.: 0.500  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	9	0	9	0.0000
2	7	0	7	0.0000
3	10	0	10	0.0000
4	9	0	9	0.0000
5	8	0	8	0.0000
-----				
TOTAL	43	0	43	0.0000

MUX LINK SIMULATOR RUN 1102 PAGE 1 OF 1. 13:05 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	9	0	9	0.0000
2	9	0	9	0.0000
3	8	0	8	0.0000
4	7	0	7	0.0000
5	10	0	10	0.0000
6	6	1	7	14.2857
7	6	1	7	14.2857
8	10	0	10	0.0000
9	7	0	7	0.0000
10	6	1	7	14.2857
TOTAL	78	3	81	3.7037



MUX LINK SIMULATOR RUN 1112 PAGE 1 OF 1. 13:09 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	8	2	10	20.0000
2	10	1	11	9.0909
3	4	2	6	33.3333
4	6	1	7	14.2857
5	7	0	7	0.0000
6	7	2	9	22.2222
7	5	1	6	16.6667
8	14	1	15	6.6667
9	6	1	7	14.2857
10	5	2	7	28.5714
-----				
TOTAL	72	13	85	15.2941

MUX LINK SIMULATOR RUN 1125 PAGE 1 OF 1. 13:12 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	10	0	10	0.0000
2	9	0	9	0.0000
3	12	0	12	0.0000
4	11	0	11	0.0000
5	13	0	13	0.0000
6	11	0	11	0.0000
7	16	0	16	0.0000
8	9	0	9	0.0000
9	6	0	6	0.0000
10	11	0	11	0.0000
11	12	0	12	0.0000
12	10	0	10	0.0000
13	14	0	14	0.0000
14	9	0	9	0.0000
15	11	0	11	0.0000
16	7	0	7	0.0000
17	7	0	7	0.0000
18	10	0	10	0.0000
19	12	0	12	0.0000
20	11	0	11	0.0000
21	11	0	11	0.0000
22	9	0	9	0.0000
23	13	0	13	0.0000
24	12	0	12	0.0000
25	10	0	10	0.0000
26	14	0	14	0.0000
27	11	0	11	0.0000
28	12	0	12	0.0000
29	14	0	14	0.0000
30	9	0	9	0.0000
TOTAL	326	0	326	0.0000

MUX LINK SIMULATOR RUN 1128 PAGE 1 OF 4. 13:16 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	11	0	11	0.0000
2	11	0	11	0.0000
3	14	0	14	0.0000
4	9	0	9	0.0000
5	12	0	12	0.0000
6	12	0	12	0.0000
7	14	0	14	0.0000
8	10	0	10	0.0000
9	8	0	8	0.0000
10	9	0	9	0.0000
11	12	0	12	0.0000
12	8	0	8	0.0000
13	12	0	12	0.0000
14	12	0	12	0.0000
15	10	0	10	0.0000
16	14	0	14	0.0000
17	10	0	10	0.0000
18	13	0	13	0.0000
19	6	0	6	0.0000
20	13	0	13	0.0000
21	8	0	8	0.0000
22	13	0	13	0.0000
23	11	0	11	0.0000
24	10	0	10	0.0000
25	6	0	6	0.0000
26	15	0	15	0.0000
27	8	0	8	0.0000
28	13	0	13	0.0000
29	14	0	14	0.0000
30	7	0	7	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
31	8	0	8	0.0000
32	10	0	10	0.0000
33	9	0	9	0.0000
34	15	1	16	6.2500
35	7	1	8	12.5000
36	9	0	9	0.0000
37	9	0	9	0.0000
38	12	1	13	7.6923
39	13	0	13	0.0000
40	10	1	11	9.0909
41	14	1	15	6.6667
42	13	0	13	0.0000
43	12	0	12	0.0000
44	10	0	10	0.0000
45	13	0	13	0.0000
46	12	0	12	0.0000
47	9	1	10	10.0000
48	10	0	10	0.0000
49	9	0	9	0.0000
50	8	1	9	11.1111
51	12	1	13	7.6923
52	11	1	12	8.3333
53	15	0	15	0.0000
54	11	1	12	8.3333
55	9	0	9	0.0000
56	12	0	12	0.0000
57	10	1	11	9.0909
58	14	0	14	0.0000
59	11	1	12	8.3333
60	8	0	8	0.0000

MUX LINK SIMULATOR RUN 1128 PAGE 3 OF 4. 13:16 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	12	0	12	0.0000
62	9	0	9	0.0000
63	16	1	17	5.8824
64	9	0	9	0.0000
65	9	0	9	0.0000
66	10	0	10	0.0000
67	7	1	8	12.5000
68	8	1	9	11.1111
69	18	0	18	0.0000
70	11	1	12	8.3333
71	12	0	12	0.0000
72	14	1	15	6.6667
73	12	1	13	7.6923
74	6	0	6	0.0000
75	8	1	9	11.1111
76	14	0	14	0.0000
77	10	0	10	0.0000
78	7	0	7	0.0000
79	9	1	10	10.0000
80	10	0	10	0.0000
81	11	1	12	8.3333
82	6	0	6	0.0000
83	11	2	13	15.3846
84	4	2	6	33.3333
85	10	0	10	0.0000
86	9	1	10	10.0000
87	9	0	9	0.0000
88	10	0	10	0.0000
89	10	1	11	9.0909
90	14	0	14	0.0000

MUX LINK SIMULATOR RUN 1128 PAGE 4 OF 4. 13:16 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 EPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	13	1	14	7.1429
92	12	2	14	14.2857
93	12	0	12	0.0000
94	10	2	12	16.6667
95	9	0	9	0.0000
96	8	1	9	11.1111
97	13	1	14	7.1429
98	9	2	11	18.1818
99	11	1	12	8.3333
100	13	2	15	13.3333
101	11	0	11	0.0000
102	8	1	9	11.1111
103	10	1	11	9.0909
104	11	0	11	0.0000
105	8	2	10	20.0000
106	7	0	7	0.0000
107	8	1	9	11.1111
108	7	0	7	0.0000
109	9	1	10	10.0000
110	12	2	14	14.2857
111	9	0	9	0.0000
112	8	1	9	11.1111
113	12	3	15	20.0000
114	9	3	12	25.0000
115	8	1	9	11.1111
116	5	2	7	28.5714
117	11	0	11	0.0000
118	15	1	16	6.2500
119	9	1	10	10.0000
120	10	1	11	9.0909
-----				
TOTAL	1252	60	1312	4.5732

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	13	0	13	0.0000
2	13	0	13	0.0000
3	11	0	11	0.0000
4	10	0	10	0.0000
5	7	0	7	0.0000
6	14	0	14	0.0000
7	12	0	12	0.0000
8	10	0	10	0.0000
9	13	0	13	0.0000
10	9	0	9	0.0000
11	11	0	11	0.0000
12	10	0	10	0.0000
13	9	0	9	0.0000
14	11	0	11	0.0000
15	10	0	10	0.0000
16	8	0	8	0.0000
17	6	0	6	0.0000
18	12	0	12	0.0000
19	13	0	13	0.0000
20	12	0	12	0.0000
21	12	0	12	0.0000
22	14	0	14	0.0000
23	14	0	14	0.0000
24	12	0	12	0.0000
25	15	0	15	0.0000
26	7	0	7	0.0000
27	10	0	10	0.0000
28	14	0	14	0.0000
29	11	0	11	0.0000
30	11	0	11	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	10	0	10	0.0000
62	11	0	11	0.0000
63	11	0	11	0.0000
64	17	0	17	0.0000
65	7	0	7	0.0000
66	9	0	9	0.0000
67	12	0	12	0.0000
68	12	0	12	0.0000
69	6	0	6	0.0000
70	8	0	8	0.0000
71	13	0	13	0.0000
72	11	0	11	0.0000
73	13	0	13	0.0000
74	11	0	11	0.0000
75	6	0	6	0.0000
76	11	0	11	0.0000
77	12	0	12	0.0000
78	16	0	16	0.0000
79	10	0	10	0.0000
80	15	0	15	0.0000
81	10	0	10	0.0000
82	12	0	12	0.0000
83	13	0	13	0.0000
84	9	0	9	0.0000
85	7	0	7	0.0000
86	14	0	14	0.0000
87	10	0	10	0.0000
88	12	0	12	0.0000
89	10	0	10	0.0000
90	8	0	8	0.0000



MUX LINK SIMULATOR RUN 1138 PAGE 4 OF 4. 13:30 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	10	0	10	0.0000
92	10	0	10	0.0000
93	15	0	15	0.0000
94	11	0	11	0.0000
95	11	0	11	0.0000
96	11	0	11	0.0000
97	8	0	8	0.0000
98	11	0	11	0.0000
99	15	0	15	0.0000
100	12	0	12	0.0000
101	8	0	8	0.0000
102	12	0	12	0.0000
103	14	0	14	0.0000
104	8	0	8	0.0000
105	10	0	10	0.0000
106	10	0	10	0.0000
107	10	0	10	0.0000
108	12	0	12	0.0000
109	8	0	8	0.0000
110	7	0	7	0.0000
111	13	0	13	0.0000
112	12	0	12	0.0000
113	12	0	12	0.0000
114	7	0	7	0.0000
115	14	0	14	0.0000
116	13	0	13	0.0000
117	19	0	19	0.0000
118	11	0	11	0.0000
119	14	0	14	0.0000
120	13	0	13	0.0000
TOTAL	1336	0	1336	0.0000

MUX LINK SIMULATOR RUN 1141 PAGE 1 OF 1. 13:45 15-AUG-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.500  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	0 68 68	100.0000
2	0 103 103	100.0000
3	0 109 109	100.0000
4	0 114 114	100.0000
5	0 116 116	100.0000
TOTAL	0 510 510	100.0000

MUX LINK SIMULATOR RUN 1161 PAGE 1 OF 1. 13:48 15-AUG-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.500  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	104	6	110	5.4545
2	113	8	121	6.6116
3	110	6	116	5.1724
4	101	8	109	7.3394
5	104	7	111	6.3063
-----				
TOTAL	532	35	567	6.1728

MUX LINK SIMULATOR RUN 1162 PAGE 1 OF 1. 13:53 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	103	5	108	4.6296
2	115	9	124	7.2581
3	103	9	112	8.0357
4	102	7	109	6.4220
5	99	8	107	7.4766
6	89	9	98	9.1837
7	93	18	111	16.2162
8	73	30	103	29.1262
9	61	36	97	37.1134
10	46	56	102	54.9020
TOTAL	884	187	1071	17.4603

MUX LINK SIMULATOR RUN 1172 PAGE 1 OF 1. 13:56 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	107	6	113	5.3097
2	96	10	106	9.4340
3	101	10	111	9.0090
4	90	4	94	4.2553
5	108	9	117	7.6923
6	112	6	118	5.0847
7	99	13	112	11.6071
8	69	34	103	33.0097
9	52	52	104	50.0000
10	43	57	100	57.0000
-----				
TOTAL	877	201	1078	18.6456

MUX LINK SIMULATOR RUN 1182 PAGE 1 OF 1. 13:59 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	99	12	111	10.8108
2	103	14	117	11.9658
3	99	8	107	7.4766
4	119	8	127	6.2992
5	102	13	115	11.3043
6	104	9	113	7.9646
7	100	12	112	10.7143
8	102	11	113	9.7345
9	116	9	125	7.2000
10	104	15	119	12.6050
-----				
TOTAL	1048	111	1159	9.5772

MUX LINK SIMULATOR RUN 1184 PAGE 1 OF 1. 14:02 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PRBE. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	114	0	114	0.0000
2	125	0	125	0.0000
3	113	0	113	0.0000
4	117	0	117	0.0000
5	108	0	108	0.0000
6	112	0	112	0.0000
7	110	0	110	0.0000
8	114	0	114	0.0000
9	117	0	117	0.0000
10	116	0	116	0.0000
11	120	0	120	0.0000
12	120	0	120	0.0000
13	118	1	119	0.8403
14	111	4	115	3.4783
15	93	14	107	13.0841
16	75	27	102	26.4706
17	68	40	108	37.0370
18	48	63	111	56.7568
19	33	76	109	69.7248
20	23	92	115	80.0000
TOTAL	1955	317	2272	13.9525

MUX LINK SIMULATOR RUN 1194 PAGE 1 OF 1. 14:14 15-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	114	6	120	5.0000
2	103	6	109	5.5046
3	107	9	116	7.7586
4	110	5	115	4.3478
5	110	6	116	5.1724
6	117	11	128	8.5938
7	107	11	118	9.3220
8	99	10	109	9.1743
9	105	8	113	7.0796
10	116	6	122	4.9180
11	100	9	109	8.2569
12	103	10	113	8.8496
13	105	9	114	7.8947
14	107	15	122	12.2951
15	95	16	111	14.4144
16	86	22	108	20.3704
17	67	48	115	41.7391
18	40	61	101	60.3960
19	28	67	95	70.5263
20	25	80	105	76.1905
TOTAL	1844	415	2259	18.3710



MUX LINK SIMULATOR RUN 1201 PAGE 1 OF 1. 13:16 17-AUG-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PRPB. OF TGT.: 0.900  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	0	20	0.0000
2	19	0	19	0.0000
3	18	0	18	0.0000
4	16	0	16	0.0000
5	17	0	17	0.0000
-----				
TOTAL	90	0	90	0.0000

MUX LINK SIMULATOR RUN 1202 PAGE 1 OF 1. 13:19 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC.  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	19	1	20	5.0000
2	17	1	18	5.5556
3	17	1	18	5.5556
4	21	2	23	8.6957
5	19	3	22	13.6364
6	17	3	20	15.0000
7	14	2	16	12.5000
8	17	3	20	15.0000
9	15	3	18	16.6667
10	12	3	15	20.0000
-----				
TOTAL	168	22	190	11.5789

MUX LINK SIMULATOR RUN 1212 PAGE 1 OF 1. 13:21 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	19	0	19	0.0000
2	16	1	17	5.8824
3	19	1	20	5.0000
4	17	1	18	5.5556
5	20	2	22	9.0909
6	19	2	21	9.5238
7	16	2	18	11.1111
8	14	3	17	17.6471
9	18	4	22	18.1818
10	16	5	21	23.8095
-----				
TOTAL	174	21	195	10.7692

MUX LINK SIMULATOR RUN 1225 PAGE 1 OF 1. 13:24 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	1	22	4.5455
2	20	1	21	4.7619
3	21	1	22	4.5455
4	20	1	21	4.7619
5	20	0	20	0.0000
6	22	1	23	4.3478
7	21	1	22	4.5455
8	19	1	20	5.0000
9	18	1	19	5.2632
10	21	1	22	4.5455
11	19	1	20	5.0000
12	18	1	19	5.2632
13	19	1	20	5.0000
14	20	1	21	4.7619
15	19	1	20	5.0000
16	21	1	22	4.5455
17	17	1	18	5.5556
18	18	1	19	5.2632
19	18	1	19	5.2632
20	22	1	23	4.3478
21	20	0	20	0.0000
22	18	2	20	10.0000
23	21	2	23	8.6957
24	18	2	20	10.0000
25	19	2	21	9.5238
26	17	2	19	10.5263
27	19	1	20	5.0000
28	19	2	21	9.5238
29	20	2	22	9.0909
30	18	1	19	5.2632
TOTAL	583	35	618	5.6634

MUX LINK SIMULATOR RUN 1228 PAGE 1 OF 4. 13:30 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	0	20	0.0000
2	22	0	22	0.0000
3	20	1	21	4.7619
4	19	1	20	5.0000
5	18	1	19	5.2632
6	21	1	22	4.5455
7	22	1	23	4.3478
8	20	1	21	4.7619
9	19	1	20	5.0000
10	20	1	21	4.7619
11	19	1	20	5.0000
12	20	1	21	4.7619
13	21	1	22	4.5455
14	19	1	20	5.0000
15	21	1	22	4.5455
16	19	1	20	5.0000
17	22	1	23	4.3478
18	21	1	22	4.5455
19	20	1	21	4.7619
20	20	1	21	4.7619
21	20	1	21	4.7619
22	22	1	23	4.3478
23	20	1	21	4.7619
24	18	1	19	5.2632
25	21	0	21	0.0000
26	20	2	22	9.0909
27	20	2	22	9.0909
28	17	2	19	10.5263
29	18	2	20	10.0000
30	20	2	22	9.0909

MUX LINK SIMULATOR RUN 1228 PAGE 2 OF 4. 13:30 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	20	2	22	9.0909
32	17	2	19	10.5263
33	20	2	22	9.0909
34	17	2	19	10.5263
35	19	2	21	9.5238
36	20	2	22	9.0909
37	18	2	20	10.0000
38	20	2	22	9.0909
39	18	2	20	10.0000
40	19	2	21	9.5238
41	20	2	22	9.0909
42	20	2	22	9.0909
43	18	2	20	10.0000
44	18	1	19	5.2632
45	20	1	21	4.7619
46	21	2	23	8.6957
47	18	3	21	14.2857
48	17	3	20	15.0000
49	16	3	19	15.7895
50	19	3	22	13.6364
51	18	3	21	14.2857
52	20	3	23	13.0435
53	17	3	20	15.0000
54	19	2	21	9.5238
55	18	3	21	14.2857
56	18	2	20	10.0000
57	18	3	21	14.2857
58	20	3	23	13.0435
59	17	3	20	15.0000
60	18	3	21	14.2857

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	16	3	19	15.7895
62	17	3	20	15.0000
63	20	2	22	9.0909
64	17	3	20	15.0000
65	17	3	20	15.0000
66	18	3	21	14.2857
67	18	2	20	10.0000
68	18	3	21	14.2857
69	18	3	21	14.2857
70	16	4	20	20.0000
71	16	4	20	20.0000
72	16	4	20	20.0000
73	13	4	17	23.5294
74	16	3	19	15.7895
75	15	4	19	21.0526
76	15	2	17	11.7647
77	17	5	22	22.7273
78	18	4	22	18.1818
79	17	4	21	19.0476
80	15	5	20	25.0000
81	15	4	19	21.0526
82	16	5	21	23.8095
83	17	3	20	15.0000
84	16	5	21	23.8095
85	17	5	22	22.7273
86	18	4	22	18.1818
87	17	3	20	15.0000
88	14	5	19	26.3158
89	14	3	17	17.6471
90	14	3	17	17.6471

MUX LINK SIMULATOR RUN 1228 PAGE 4 OF 4. 13:30 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	18	5	23	21.7391
92	17	4	21	19.0476
93	18	4	22	18.1818
94	15	4	19	21.0526
95	14	3	17	17.6471
96	18	5	23	21.7391
97	13	5	18	27.7778
98	15	5	20	25.0000
99	16	4	20	20.0000
100	17	5	22	22.7273
101	13	5	18	27.7778
102	17	4	21	19.0476
103	15	3	18	16.6667
104	12	4	16	25.0000
105	16	5	21	23.8095
106	17	2	19	10.5263
107	13	5	18	27.7778
108	16	5	21	23.8095
109	15	5	20	25.0000
110	14	5	19	26.3158
111	16	3	19	15.7895
112	14	6	20	30.0000
113	13	7	20	35.0000
114	11	9	20	45.0000
115	9	12	21	57.1429
116	7	12	19	63.1579
117	5	14	19	73.6842
118	4	14	18	77.7778
119	3	17	20	85.0000
120	2	18	20	90.0000
TOTAL	2041	409	2450	16.6939



RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	0	20	0.0000
2	23	0	23	0.0000
3	19	0	19	0.0000
4	21	0	21	0.0000
5	23	0	23	0.0000
6	20	0	20	0.0000
7	20	0	20	0.0000
8	20	0	20	0.0000
9	21	0	21	0.0000
10	19	0	19	0.0000
11	21	0	21	0.0000
12	20	0	20	0.0000
13	23	0	23	0.0000
14	21	0	21	0.0000
15	18	0	18	0.0000
16	21	0	21	0.0000
17	22	0	22	0.0000
18	20	0	20	0.0000
19	20	0	20	0.0000
20	19	0	19	0.0000
21	22	0	22	0.0000
22	21	0	21	0.0000
23	23	0	23	0.0000
24	21	0	21	0.0000
25	19	0	19	0.0000
26	19	0	19	0.0000
27	19	0	19	0.0000
28	21	0	21	0.0000
29	21	0	21	0.0000
30	20	0	20	0.0000

MUX LINK SIMULATOR RUN 1238 PAGE 2 OF 4. 13:44 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	22	0	22	0.0000
32	22	0	22	0.0000
33	21	0	21	0.0000
34	22	0	22	0.0000
35	21	0	21	0.0000
36	21	0	21	0.0000
37	22	0	22	0.0000
38	22	0	22	0.0000
39	19	0	19	0.0000
40	18	0	18	0.0000
41	22	0	22	0.0000
42	19	0	19	0.0000
43	18	1	19	5.2632
44	21	1	22	4.5455
45	19	1	20	5.0000
46	21	1	22	4.5455
47	21	1	22	4.5455
48	21	1	22	4.5455
49	20	1	21	4.7619
50	21	1	22	4.5455
51	21	1	22	4.5455
52	19	0	19	0.0000
53	20	1	21	4.7619
54	19	1	20	5.0000
55	19	1	20	5.0000
56	20	1	21	4.7619
57	22	1	23	4.3478
58	21	1	22	4.5455
59	21	1	22	4.5455
60	19	1	20	5.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	21	0	21	0.0000
62	21	1	22	4.5455
63	19	1	20	5.0000
64	21	1	22	4.5455
65	20	1	21	4.7619
66	20	1	21	4.7619
67	19	0	19	0.0000
68	19	1	20	5.0000
69	20	1	21	4.7619
70	17	1	18	5.5556
71	20	1	21	4.7619
72	19	1	20	5.0000
73	19	1	20	5.0000
74	18	1	19	5.2632
75	18	1	19	5.2632
76	15	1	16	6.2500
77	21	1	22	4.5455
78	18	1	19	5.2632
79	17	1	18	5.5556
80	19	1	20	5.0000
81	20	0	20	0.0000
82	20	1	21	4.7619
83	19	1	20	5.0000
84	19	1	20	5.0000
85	21	1	22	4.5455
86	20	1	21	4.7619
87	21	0	21	0.0000
88	20	1	21	4.7619
89	21	1	22	4.5455
90	22	1	23	4.3478

MUX LINK SIMULATOR RUN 1238 PAGE 4 OF 4. 13:44 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	20	1	21	4.7619
92	20	1	21	4.7619
93	17	0	17	0.0000
94	19	1	20	5.0000
95	21	0	21	0.0000
96	18	1	19	5.2632
97	21	1	22	4.5455
98	17	1	18	5.5556
99	22	1	23	4.3478
100	22	1	23	4.3478
101	20	1	21	4.7619
102	22	0	22	0.0000
103	22	1	23	4.3478
104	21	1	22	4.5455
105	19	2	21	9.5238
106	19	2	21	9.5238
107	15	2	17	11.7647
108	21	1	22	4.5455
109	18	2	20	10.0000
110	18	3	21	14.2857
111	17	3	20	15.0000
112	18	4	22	18.1818
113	10	8	18	44.4444
114	12	10	22	45.4545
115	8	11	19	57.8947
116	8	14	22	63.6364
117	6	14	20	70.0000
118	5	16	21	76.1905
119	3	14	17	82.3529
120	2	16	18	88.8889
TOTAL	2296	176	2472	7.1197

MUX LINK SIMULATOR RUN 1241 PAGE 1 OF 1. 13:58 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	201	201	100.0000
2	0	216	216	100.0000
3	0	221	221	100.0000
4	0	216	216	100.0000
5	0	218	218	100.0000
-----				
TOTAL	0	1072	1072	100.0000

MUX LINK SIMULATOR RUN 1261 PAGE 1 OF 1. 14:01 17-AUG-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.900  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	166	38	204	18.6275
2	178	40	218	18.3486
3	175	36	211	17.0616
4	181	42	223	18.8341
5	156	51	207	24.6377
TOTAL	856	207	1063	19.4732

MUX LINK SIMULATOR RUN 1262 PAGE 1 OF 1. 14:04 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	190	26	216	12.0370
2	193	26	219	11.8721
3	183	28	211	13.2701
4	189	29	218	13.3028
5	167	49	216	22.6852
6	74	136	210	64.7619
7	16	195	211	92.4171
8	3	201	204	98.5294
9	0	216	216	100.0000
10	0	210	210	100.0000
TOTAL	1015	1116	2131	52.3698

MUX LINK SIMULATOR RUN 1272 PAGE 1 OF 1. 14:07 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	206	8	214	3.7383
2	203	8	211	3.7915
3	192	8	200	4.0000
4	204	7	211	3.3175
5	178	33	211	15.6398
6	86	116	202	57.4257
7	30	178	208	85.5769
8	10	205	215	95.3488
9	2	214	216	99.0741
10	0	210	210	100.0000
TOTAL	1111	987	2098	47.0448



MUX LINK SIMULATOR RUN 1282 PAGE 1 OF 1. 14:10 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:-

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	205	12	217	5.5300
2	207	11	218	5.0459
3	210	11	221	4.9774
4	198	11	209	5.2632
5	211	13	224	5.8036
6	203	12	215	5.5814
7	197	14	211	6.6351
8	205	14	219	6.3927
9	197	14	211	6.6351
10	203	23	226	10.1770
TOTAL	2036	135	2171	6.2183

MUX LINK SIMULATOR RUN 1284 PAGE 1 OF 1. 14:13 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	189	26	215	12.0930
2	188	30	218	13.7615
3	185	28	213	13.1455
4	180	28	208	13.4615
5	188	32	220	14.5455
6	192	29	221	13.1222
7	188	31	219	14.1553
8	189	32	221	14.4796
9	178	32	210	15.2381
10	179	37	216	17.1296
11	123	95	218	43.5780
12	45	155	200	77.5000
13	12	198	210	94.2857
14	3	208	211	98.5782
15	1	212	213	99.5305
16	0	209	209	100.0000
17	0	212	212	100.0000
18	0	218	218	100.0000
19	0	215	215	100.0000
20	0	215	215	100.0000
TOTAL	2040	2242	4282	52.3587

MUX LINK SIMULATOR RUN 1294 PAGE 1 OF 1. 14:17 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	193	22	215	10.2326
2	199	22	221	9.9548
3	185	22	207	10.6280
4	190	24	214	11.2150
5	191	22	213	10.3286
6	197	22	219	10.0457
7	181	25	206	12.1359
8	187	25	212	11.7925
9	189	27	216	12.5000
10	175	30	205	14.6341
11	127	75	202	37.1287
12	61	155	216	71.7593
13	19	199	218	91.2844
14	6	212	218	97.2477
15	1	216	217	99.5392
16	0	215	215	100.0000
17	0	216	216	100.0000
18	0	216	216	100.0000
19	0	222	222	100.0000
20	0	205	205	100.0000
TOTAL	2101	2172	4273	50.8308

MUX LINK SIMULATOR RUN 1301 PAGE 1 OF 1. 17:53 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	1	0	1	0.0000
2	1	0	1	0.0000
3	2	0	2	0.0000
4	1	0	1	0.0000
5	2	0	2	0.0000
	-----	-----	-----	-----
TOTAL	7	0	7	0.0000

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	3	0	3	0.0000
2	0	0	0	0.0000
3	3	0	3	0.0000
4	1	0	1	0.0000
5	1	0	1	0.0000
6	3	0	3	0.0000
7	2	0	2	0.0000
8	1	0	1	0.0000
9	2	0	2	0.0000
10	2	0	2	0.0000
TOTAL	18	0	18	0.0000

MUX LINK SIMULATOR RUN 1312 PAGE 1 OF 1. 17:59 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	0	2	0.0000
2	1	0	1	0.0000
3	1	0	1	0.0000
4	4	0	4	0.0000
5	1	0	1	0.0000
6	1	0	1	0.0000
7	0	0	0	0.0000
8	2	0	2	0.0000
9	2	0	2	0.0000
10	1	0	1	0.0000
	-----	-----	-----	-----
TOTAL	15	0	15	0.0000

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	0	0	0	0.0000
2	1	0	1	0.0000
3	3	0	3	0.0000
4	3	0	3	0.0000
5	0	0	0	0.0000
6	2	0	2	0.0000
7	4	0	4	0.0000
8	4	0	4	0.0000
9	1	0	1	0.0000
10	0	0	0	0.0000
11	2	0	2	0.0000
12	0	0	0	0.0000
13	1	0	1	0.0000
14	6	0	6	0.0000
15	3	0	3	0.0000
16	1	0	1	0.0000
17	2	0	2	0.0000
18	1	0	1	0.0000
19	2	0	2	0.0000
20	5	0	5	0.0000
21	4	0	4	0.0000
22	1	0	1	0.0000
23	0	0	0	0.0000
24	1	0	1	0.0000
25	4	0	4	0.0000
26	5	0	5	0.0000
27	4	0	4	0.0000
28	4	0	4	0.0000
29	3	0	3	0.0000
30	2	0	2	0.0000
TOTAL	69	0	69	0.0000

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	0	2	0.0000
2	2	0	2	0.0000
3	2	0	2	0.0000
4	3	0	3	0.0000
5	2	0	2	0.0000
6	3	0	3	0.0000
7	3	0	3	0.0000
8	1	0	1	0.0000
9	3	0	3	0.0000
10	2	0	2	0.0000
11	2	0	2	0.0000
12	2	0	2	0.0000
13	2	0	2	0.0000
14	3	0	3	0.0000
15	1	0	1	0.0000
16	3	0	3	0.0000
17	2	0	2	0.0000
18	3	0	3	0.0000
19	1	0	1	0.0000
20	1	0	1	0.0000
21	2	0	2	0.0000
22	4	0	4	0.0000
23	4	0	4	0.0000
24	2	0	2	0.0000
25	2	0	2	0.0000
26	5	0	5	0.0000
27	3	0	3	0.0000
28	1	0	1	0.0000
29	2	0	2	0.0000
30	4	0	4	0.0000



RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	5	0	5	0.0000
32	1	0	1	0.0000
33	4	0	4	0.0000
34	4	0	4	0.0000
35	1	0	1	0.0000
36	4	0	4	0.0000
37	4	0	4	0.0000
38	4	0	4	0.0000
39	4	0	4	0.0000
40	2	0	2	0.0000
41	1	0	1	0.0000
42	2	0	2	0.0000
43	2	0	2	0.0000
44	1	0	1	0.0000
45	1	0	1	0.0000
46	3	0	3	0.0000
47	2	0	2	0.0000
48	1	0	1	0.0000
49	3	0	3	0.0000
50	4	0	4	0.0000
51	3	0	3	0.0000
52	0	0	0	0.0000
53	2	0	2	0.0000
54	1	0	1	0.0000
55	2	0	2	0.0000
56	1	0	1	0.0000
57	1	0	1	0.0000
58	3	0	3	0.0000
59	2	0	2	0.0000
60	5	0	5	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	3	0	3	0.0000
62	1	0	1	0.0000
63	3	0	3	0.0000
64	1	0	1	0.0000
65	2	0	2	0.0000
66	4	0	4	0.0000
67	2	0	2	0.0000
68	4	0	4	0.0000
69	1	0	1	0.0000
70	1	0	1	0.0000
71	1	0	1	0.0000
72	3	0	3	0.0000
73	1	0	1	0.0000
74	3	0	3	0.0000
75	0	0	0	0.0000
76	1	0	1	0.0000
77	1	0	1	0.0000
78	2	0	2	0.0000
79	3	0	3	0.0000
80	2	0	2	0.0000
81	1	0	1	0.0000
82	2	0	2	0.0000
83	2	0	2	0.0000
84	2	0	2	0.0000
85	5	0	5	0.0000
86	4	0	4	0.0000
87	0	0	0	0.0000
88	0	0	0	0.0000
89	2	0	2	0.0000
90	0	0	0	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	2	0	2	0.0000
92	3	0	3	0.0000
93	3	0	3	0.0000
94	4	0	4	0.0000
95	1	0	1	0.0000
96	1	0	1	0.0000
97	1	0	1	0.0000
98	0	0	0	0.0000
99	1	0	1	0.0000
100	3	0	3	0.0000
101	3	0	3	0.0000
102	2	0	2	0.0000
103	2	0	2	0.0000
104	4	0	4	0.0000
105	2	0	2	0.0000
106	1	0	1	0.0000
107	4	0	4	0.0000
108	1	0	1	0.0000
109	1	0	1	0.0000
110	3	0	3	0.0000
111	2	0	2	0.0000
112	2	0	2	0.0000
113	4	0	4	0.0000
114	2	0	2	0.0000
115	7	0	7	0.0000
116	1	0	1	0.0000
117	2	0	2	0.0000
118	0	0	0	0.0000
119	3	0	3	0.0000
120	3	0	3	0.0000
TOTAL	270	0	270	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	1	0	1	0.0000
2	2	0	2	0.0000
3	2	0	2	0.0000
4	1	0	1	0.0000
5	1	1	2	50.0000
6	2	1	3	33.3333
7	0	0	0	0.0000
8	1	0	1	0.0000
9	4	0	4	0.0000
10	2	0	2	0.0000
11	1	0	1	0.0000
12	3	0	3	0.0000
13	1	0	1	0.0000
14	0	0	0	0.0000
15	3	0	3	0.0000
16	0	0	0	0.0000
17	3	0	3	0.0000
18	1	0	1	0.0000
19	2	0	2	0.0000
20	0	0	0	0.0000
21	2	0	2	0.0000
22	1	0	1	0.0000
23	5	1	6	16.6667
24	4	0	4	0.0000
25	2	1	3	33.3333
26	1	0	1	0.0000
27	2	1	3	33.3333
28	1	0	1	0.0000
29	0	0	0	0.0000
30	0	1	1	100.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	1	0	1	0.0000
32	4	0	4	0.0000
33	0	0	0	0.0000
34	3	0	3	0.0000
35	2	0	2	0.0000
36	0	0	0	0.0000
37	3	0	3	0.0000
38	6	0	6	0.0000
39	2	0	2	0.0000
40	2	1	3	33.3333
41	2	1	3	33.3333
42	4	1	5	20.0000
43	1	0	1	0.0000
44	4	0	4	0.0000
45	1	0	1	0.0000
46	2	1	3	33.3333
47	1	0	1	0.0000
48	0	0	0	0.0000
49	2	0	2	0.0000
50	4	0	4	0.0000
51	1	1	2	50.0000
52	4	0	4	0.0000
53	2	0	2	0.0000
54	0	0	0	0.0000
55	3	1	4	25.0000
56	1	0	1	0.0000
57	0	0	0	0.0000
58	0	1	1	100.0000
59	3	1	4	25.0000
60	1	0	1	0.0000

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	2	0	2	0.0000
62	2	0	2	0.0000
63	2	0	2	0.0000
64	0	0	0	0.0000
65	2	0	2	0.0000
66	2	1	3	33.3333
67	1	0	1	0.0000
68	1	1	2	50.0000
69	2	0	2	0.0000
70	1	0	1	0.0000
71	0	0	0	0.0000
72	0	0	0	0.0000
73	1	0	1	0.0000
74	1	0	1	0.0000
75	3	0	3	0.0000
76	1	0	1	0.0000
77	3	0	3	0.0000
78	1	0	1	0.0000
79	1	1	2	50.0000
80	1	1	2	50.0000
81	1	1	2	50.0000
82	0	0	0	0.0000
83	2	1	3	33.3333
84	3	0	3	0.0000
85	3	0	3	0.0000
86	2	0	2	0.0000
87	2	0	2	0.0000
88	1	1	2	50.0000
89	2	0	2	0.0000
90	4	0	4	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
91	4 0 4	0.0000
92	2 0 2	0.0000
93	2 1 3	33.3333
94	3 0 3	0.0000
95	3 0 3	0.0000
96	2 0 2	0.0000
97	5 0 5	0.0000
98	1 0 1	0.0000
99	1 1 2	50.0000
100	3 0 3	0.0000
101	0 0 0	0.0000
102	0 1 1	100.0000
103	0 0 0	0.0000
104	2 0 2	0.0000
105	2 0 2	0.0000
106	0 0 0	0.0000
107	1 0 1	0.0000
108	4 0 4	0.0000
109	1 0 1	0.0000
110	2 0 2	0.0000
111	0 0 0	0.0000
112	3 0 3	0.0000
113	2 0 2	0.0000
114	0 0 0	0.0000
115	2 0 2	0.0000
116	3 0 3	0.0000
117	0 0 0	0.0000
118	1 1 2	50.0000
119	2 0 2	0.0000
120	1 1 2	50.0000
TOTAL	206 26 232	11.2069

MUX LINK SIMULATOR RUN 1341 PAGE 1 OF 1. 18:35 17-AUG-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.100  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	0 6	6 100.0000
2	0 5	5 100.0000
3	0 3	3 100.0000
4	0 9	9 100.0000
5	0 12	12 100.0000
TOTAL	----- 0 35 35	----- 100.0000



RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	22 1 23	4.3478
2	30 1 31	3.2258
3	15 2 17	11.7647
4	21 2 23	8.6957
5	27 1 28	3.5714
	-----	-----
TOTAL	115 7 122	5.7377

MUX LINK SIMULATOR RUN 1362 PAGE 1 OF 1. 18:40 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	14	0	14	0.0000
2	21	0	21	0.0000
3	17	1	18	5.5556
4	12	0	12	0.0000
5	17	1	18	5.5556
6	17	1	18	5.5556
7	21	1	22	4.5455
8	22	1	23	4.3478
9	15	1	16	6.2500
10	20	2	22	9.0909
TOTAL	176	8	184	4.3478

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	27	0	27	0.0000
2	27	0	27	0.0000
3	22	0	22	0.0000
4	23	0	23	0.0000
5	20	0	20	0.0000
6	15	0	15	0.0000
7	24	0	24	0.0000
8	30	0	30	0.0000
9	14	0	14	0.0000
10	22	0	22	0.0000
TOTAL	224	0	224	0.0000

MUX LINK SIMULATOR RUN 1382 PAGE 1 OF 1. 18:47 17-AUG-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	18	2	20	10.0000
2	18	3	21	14.2857
3	14	5	19	26.3158
4	20	2	22	9.0909
5	15	5	20	25.0000
6	19	1	20	5.0000
7	20	3	23	13.0435
8	18	3	21	14.2857
9	23	3	26	11.5385
10	22	6	28	21.4286
	-----	-----	-----	-----
TOTAL	187	33	220	15.0000

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	1	24	4.1667
2	25	1	26	3.8462
3	21	0	21	0.0000
4	18	2	20	10.0000
5	20	2	22	9.0909
6	20	3	23	13.0435
7	26	1	27	3.7037
8	17	3	20	15.0000
9	24	3	27	11.1111
10	22	1	23	4.3478
11	24	1	25	4.0000
12	22	0	22	0.0000
13	27	1	28	3.5714
14	20	1	21	4.7619
15	27	2	29	6.8966
16	27	3	30	10.0000
17	18	1	19	5.2632
18	24	1	25	4.0000
19	24	1	25	4.0000
20	23	2	25	8.0000
TOTAL	452	30	482	6.2241

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	0	22	0.0000
2	19	0	19	0.0000
3	20	1	21	4.7619
4	17	0	17	0.0000
5	19	0	19	0.0000
6	18	0	18	0.0000
7	29	0	29	0.0000
8	21	0	21	0.0000
9	27	1	28	3.5714
10	25	0	25	0.0000
11	18	1	19	5.2632
12	23	1	24	4.1667
13	18	1	19	5.2632
14	18	0	18	0.0000
15	21	1	22	4.5455
16	21	1	22	4.5455
17	22	1	23	4.3478
18	29	2	31	6.4516
19	16	1	17	5.8824
20	19	0	19	0.0000
TOTAL	422	11	433	2.5404

MUX LINK SIMULATOR RUN 1401 PAGE 1 OF 1. 19:10 22-AUG-78  
INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PRBB. OF TGT.: 0.500  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	7 0 7	0.0000
2	7 1 8	12.5000
3	10 0 10	0.0000
4	6 1 7	14.2857
5	3 1 4	25.0000
TOTAL	33 3 36	8.3333

MUX LINK SIMULATOR RUN 1402 PAGE 1 OF 1. 19:13 22-AUG-76  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	10	1	11	9.0909
2	10	0	10	0.0000
3	12	2	14	14.2857
4	10	0	10	0.0000
5	9	3	12	25.0000
6	10	1	11	9.0909
7	6	1	7	14.2857
8	9	1	10	10.0000
9	9	1	10	10.0000
10	8	0	8	0.0000
TOTAL	93	10	103	9.7087



RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	10	1	11	9.0909
2	8	1	9	11.1111
3	9	0	9	0.0000
4	10	1	11	9.0909
5	6	0	6	0.0000
6	9	1	10	10.0000
7	6	1	7	14.2857
8	9	0	9	0.0000
9	9	1	10	10.0000
10	10	0	10	0.0000
TOTAL	86	6	92	6.5217

MUX LINK SIMULATOR RUN 1425 PAGE 1 OF 1. 19:20 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	12	1	13	7.6923
2	13	0	13	0.0000
3	6	0	6	0.0000
4	11	0	11	0.0000
5	10	1	11	9.0909
6	8	0	8	0.0000
7	13	0	13	0.0000
8	7	1	8	12.5000
9	8	1	9	11.1111
10	15	0	15	0.0000
11	11	1	12	8.3333
12	9	1	10	10.0000
13	9	1	10	10.0000
14	11	0	11	0.0000
15	10	0	10	0.0000
16	14	0	14	0.0000
17	9	0	9	0.0000
18	13	0	13	0.0000
19	15	0	15	0.0000
20	8	1	9	11.1111
21	7	1	8	12.5000
22	10	1	11	9.0909
23	12	1	13	7.6923
24	10	0	10	0.0000
25	11	1	12	8.3333
26	10	1	11	9.0909
27	10	0	10	0.0000
28	11	1	12	8.3333
29	10	0	10	0.0000
30	5	0	5	0.0000
TOTAL	308	14	322	4.3478

MUX LINK SIMULATOR RUN 1428 PAGE 1 OF 4. 19:24 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	11	1	12	8.3333
2	8	0	8	0.0000
3	8	0	8	0.0000
4	9	0	9	0.0000
5	6	1	7	14.2857
6	8	0	8	0.0000
7	11	0	11	0.0000
8	13	1	14	7.1429
9	8	1	9	11.1111
10	9	1	10	10.0000
11	12	0	12	0.0000
12	12	0	12	0.0000
13	12	1	13	7.6923
14	12	1	13	7.6923
15	10	1	11	9.0909
16	15	1	16	6.2500
17	5	1	6	16.6667
18	8	1	9	11.1111
19	10	0	10	0.0000
20	7	0	7	0.0000
21	12	0	12	0.0000
22	16	1	17	5.8824
23	12	0	12	0.0000
24	14	1	15	6.6667
25	9	1	10	10.0000
26	10	0	10	0.0000
27	7	0	7	0.0000
28	10	0	10	0.0000
29	11	0	11	0.0000
30	11	0	11	0.0000

MUX LINK SIMULATOR RUN 1428 PAGE 2 OF 4. 19:24 22-AUG-78  
 INT. SENSORS, LINEAR PELLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER PELL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	11	0	11	0.0000
32	12	0	12	0.0000
33	12	1	13	7.6923
34	13	0	13	0.0000
35	12	1	13	7.6923
36	11	1	12	8.3333
37	9	1	10	10.0000
38	12	0	12	0.0000
39	12	1	13	7.6923
40	16	0	16	0.0000
41	10	0	10	0.0000
42	11	1	12	8.3333
43	15	0	15	0.0000
44	12	0	12	0.0000
45	14	0	14	0.0000
46	8	1	9	11.1111
47	12	1	13	7.6923
48	14	0	14	0.0000
49	11	0	11	0.0000
50	13	1	14	7.1429
51	14	0	14	0.0000
52	12	0	12	0.0000
53	13	1	14	7.1429
54	10	1	11	9.0909
55	17	1	18	5.5556
56	10	1	11	9.0909
57	12	1	13	7.6923
58	14	1	15	6.6667
59	9	1	10	10.0000
60	13	0	13	0.0000

-----  
 MUX LINK SIMULATOR RUN 1428 PAGE 3 OF 4. 19:24 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	9	1	10	10.0000
62	13	0	13	0.0000
63	10	1	11	9.0909
64	6	1	7	14.2857
65	14	1	15	6.6667
66	14	1	15	6.6667
67	9	0	9	0.0000
68	12	0	12	0.0000
69	10	0	10	0.0000
70	12	1	13	7.6923
71	12	1	13	7.6923
72	12	1	13	7.6923
73	13	0	13	0.0000
74	10	0	10	0.0000
75	7	0	7	0.0000
76	10	0	10	0.0000
77	16	1	17	5.8824
78	12	0	12	0.0000
79	12	1	13	7.6923
80	15	0	15	0.0000
81	15	1	16	6.2500
82	14	0	14	0.0000
83	10	0	10	0.0000
84	10	1	11	9.0909
85	11	1	12	8.3333
86	12	1	13	7.6923
87	9	0	9	0.0000
88	12	0	12	0.0000
89	15	0	15	0.0000
90	12	0	12	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	11	0	11	0.0000
92	13	0	13	0.0000
93	14	0	14	0.0000
94	9	0	9	0.0000
95	15	0	15	0.0000
96	11	0	11	0.0000
97	9	0	9	0.0000
98	12	1	13	7.6923
99	11	0	11	0.0000
100	9	0	9	0.0000
101	9	0	9	0.0000
102	8	0	8	0.0000
103	12	1	13	7.6923
104	12	1	13	7.6923
105	11	1	12	8.3333
106	10	0	10	0.0000
107	8	1	9	11.1111
108	12	1	13	7.6923
109	6	1	7	14.2857
110	7	1	8	12.5000
111	12	0	12	0.0000
112	12	0	12	0.0000
113	13	1	14	7.1429
114	9	1	10	10.0000
115	13	0	13	0.0000
116	8	0	8	0.0000
117	14	1	15	6.6667
118	10	1	11	9.0909
119	11	0	11	0.0000
120	13	1	14	7.1429
TOTAL	1342	57	1399	4.0743

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	12	0	12	0.0000
2	11	0	11	0.0000
3	12	1	13	7.6923
4	12	0	12	0.0000
5	12	1	13	7.6923
6	10	0	10	0.0000
7	9	1	10	10.0000
8	10	1	11	9.0909
9	12	0	12	0.0000
10	13	0	13	0.0000
11	12	1	13	7.6923
12	9	0	9	0.0000
13	14	1	15	6.6667
14	8	0	8	0.0000
15	17	0	17	0.0000
16	11	1	12	8.3333
17	9	1	10	10.0000
18	13	0	13	0.0000
19	12	0	12	0.0000
20	12	1	13	7.6923
21	8	0	8	0.0000
22	9	1	10	10.0000
23	11	1	12	8.3333
24	14	0	14	0.0000
25	13	0	13	0.0000
26	8	0	8	0.0000
27	11	0	11	0.0000
28	13	1	14	7.1429
29	12	0	12	0.0000
30	6	1	7	14.2857

MUX LINK SIMULATOR RUN 1438 PAGE 2 OF 4. 19:38 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	11	1	12	8.3333
32	10	0	10	0.0000
33	12	1	13	7.6923
34	17	0	17	0.0000
35	9	1	10	10.0000
36	12	0	12	0.0000
37	9	0	9	0.0000
38	16	0	16	0.0000
39	10	1	11	9.0909
40	15	1	16	6.2500
41	15	1	16	6.2500
42	5	1	6	16.6667
43	15	0	15	0.0000
44	12	0	12	0.0000
45	11	0	11	0.0000
46	9	0	9	0.0000
47	12	0	12	0.0000
48	10	1	11	9.0909
49	9	0	9	0.0000
50	11	1	12	8.3333
51	13	1	14	7.1429
52	12	0	12	0.0000
53	11	0	11	0.0000
54	7	0	7	0.0000
55	8	1	9	11.1111
56	9	1	10	10.0000
57	10	1	11	9.0909
58	11	1	12	8.3333
59	12	1	13	7.6923
60	11	1	12	8.3333



RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRBB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	13	0	13	0.0000
62	13	1	14	7.1429
63	14	1	15	6.6667
64	14	0	14	0.0000
65	15	1	16	6.2500
66	11	1	12	8.3333
67	10	1	11	9.0909
68	8	0	8	0.0000
69	7	1	8	12.5000
70	12	0	12	0.0000
71	13	1	14	7.1429
72	9	0	9	0.0000
73	9	0	9	0.0000
74	12	0	12	0.0000
75	15	0	15	0.0000
76	16	1	17	5.8824
77	14	0	14	0.0000
78	14	1	15	6.6667
79	14	1	15	6.6667
80	17	1	18	5.5556
81	12	1	13	7.6923
82	12	1	13	7.6923
83	13	0	13	0.0000
84	9	0	9	0.0000
85	10	1	11	9.0909
86	10	1	11	9.0909
87	10	1	11	9.0909
88	12	0	12	0.0000
89	11	1	12	8.3333
90	11	1	12	8.3333

-----

MUX LINK SIMULATOR RUN 1438 PAGE 4 OF 4. 19:38 22-AUG-76  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	10	1	11	9.0909
92	12	1	13	7.6923
93	13	1	14	7.1429
94	8	1	9	11.1111
95	12	0	12	0.0000
96	9	0	9	0.0000
97	7	1	8	12.5000
98	13	1	14	7.1429
99	11	1	12	8.3333
100	8	0	8	0.0000
101	10	1	11	9.0909
102	11	1	12	8.3333
103	9	1	10	10.0000
104	9	0	9	0.0000
105	10	0	10	0.0000
106	10	0	10	0.0000
107	12	1	13	7.6923
108	11	1	12	8.3333
109	7	0	7	0.0000
110	14	1	15	6.6667
111	13	0	13	0.0000
112	12	1	13	7.6923
113	10	0	10	0.0000
114	6	0	6	0.0000
115	7	0	7	0.0000
116	9	1	10	10.0000
117	11	0	11	0.0000
118	12	0	12	0.0000
119	12	1	13	7.6923
120	9	0	9	0.0000
TOTAL	1336	63	1399	4.5032

MUX LINK SIMULATOR RUN 1441      PAGE 1 OF 1.      19:52 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PRBB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	114	114	100.0000
2	0	92	92	100.0000
3	0	97	97	100.0000
4	0	116	116	100.0000
5	0	94	94	100.0000
-----				
TOTAL	0	513	513	100.0000

MUX LINK SIMULATOR RUN 1461 PAGE 1 OF 1. 19:56 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRBB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	120	1	121	0.8264
2	107	0	107	0.0000
3	112	1	113	0.8850
4	112	1	113	0.8850
5	115	1	116	0.8621
-----				
TOTAL	566	4	570	0.7018

MUX LINK SIMULATOR RUN 1462 PAGE 1 OF 1. 19:59 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	88	9	97	9.2784
2	92	8	100	8.0000
3	109	6	115	5.2174
4	102	5	107	4.6729
5	84	10	94	10.6383
6	99	9	108	8.3333
7	99	11	110	10.0000
8	93	12	105	11.4286
9	105	5	110	4.5455
10	96	7	103	6.7961
TOTAL	967	82	1049	7.8170

MUX LINK SIMULATOR RUN 1472 PAGE 1 OF 1. 20:01 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	110	4	114	3.5088
2	101	2	103	1.9417
3	114	1	115	0.8696
4	99	1	100	1.0000
5	95	2	97	2.0619
6	109	2	111	1.8018
7	114	1	115	0.8696
8	107	0	107	0.0000
9	114	2	116	1.7241
10	101	1	102	0.9804
TOTAL	1064	16	1080	1.4815

MUX LINK SIMULATOR RUN 1482 PAGE 1 OF 1. 20:04 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	101	14	115	12.1739
2	99	17	116	14.6552
3	107	10	117	8.5470
4	100	15	115	13.0435
5	107	15	122	12.2951
6	91	10	101	9.9010
7	121	12	133	9.0226
8	110	15	125	12.0000
9	99	12	111	10.8108
10	112	7	119	5.8824
TOTAL	1047	127	1174	10.8177

MUX LINK SIMULATOR RUN 1484 PAGE 1 OF 1. 20:08 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PRBB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	110	4	114	3.5088
2	98	6	104	5.7692
3	105	8	113	7.0796
4	114	3	117	2.5641
5	90	8	98	8.1633
6	101	5	106	4.7170
7	108	5	113	4.4248
8	108	7	115	6.0870
9	102	8	110	7.2727
10	99	6	105	5.7143
11	101	8	109	7.3394
12	91	6	97	6.1856
13	108	6	114	5.2632
14	116	9	125	7.2000
15	94	9	103	8.7379
16	101	8	109	7.3394
17	89	8	97	8.2474
18	120	6	126	4.7619
19	107	5	112	4.4643
20	95	6	101	5.9406
TOTAL	2057	131	2188	5.9872



RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	99	14	113	12.3894
2	98	8	106	7.5472
3	103	14	117	11.9658
4	110	13	123	10.5691
5	99	17	116	14.6552
6	71	16	87	18.3908
7	94	11	105	10.4762
8	100	14	114	12.2807
9	103	6	109	5.5046
10	92	15	107	14.0187
11	103	10	113	8.8496
12	89	13	102	12.7451
13	92	14	106	13.2075
14	109	15	124	12.0968
15	97	9	106	8.4906
16	97	16	113	14.1593
17	109	16	125	12.8000
18	124	12	136	8.8235
19	106	19	125	15.2000
20	97	15	112	13.3929
TOTAL	----- 1992	----- 267	----- 2259	----- 11.8194

MUX LINK SIMULATOR RUN 1501 PAGE 1 OF 1. 20:18 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	0	2	0.0000
2	3	0	3	0.0000
3	3	0	3	0.0000
4	1	0	1	0.0000
5	2	0	2	0.0000
TOTAL	11	0	11	0.0000

MUX LINK SIMULATOR RUN 1502 PAGE 1 OF 1. 20:22 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	1	0	1	0.0000
2	1	0	1	0.0000
3	2	1	3	33.3333
4	2	0	2	0.0000
5	3	1	4	25.0000
6	1	0	1	0.0000
7	2	0	2	0.0000
8	1	0	1	0.0000
9	6	0	6	0.0000
10	1	0	1	0.0000
TOTAL	20	2	22	9.0909

MUX LINK SIMULATOR RUN 1512 PAGE 1 OF 1. 20:25 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	4	0	4	0.0000
2	0	0	0	0.0000
3	0	0	0	0.0000
4	0	0	0	0.0000
5	2	0	2	0.0000
6	1	0	1	0.0000
7	1	0	1	0.0000
8	0	0	0	0.0000
9	0	0	0	0.0000
10	0	0	0	0.0000
TOTAL	8	0	8	0.0000

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	0	0	0.0000
2	1	0	1	0.0000
3	0	0	0	0.0000
4	0	0	0	0.0000
5	1	0	1	0.0000
6	2	0	2	0.0000
7	0	0	0	0.0000
8	0	1	1	100.0000
9	0	0	0	0.0000
10	2	0	2	0.0000
11	3	0	3	0.0000
12	2	0	2	0.0000
13	1	0	1	0.0000
14	2	0	2	0.0000
15	1	0	1	0.0000
16	2	0	2	0.0000
17	0	1	1	100.0000
18	0	0	0	0.0000
19	2	1	3	33.3333
20	2	0	2	0.0000
21	2	0	2	0.0000
22	0	0	0	0.0000
23	0	0	0	0.0000
24	1	0	1	0.0000
25	1	0	1	0.0000
26	1	0	1	0.0000
27	3	1	4	25.0000
28	3	0	3	0.0000
29	0	0	0	0.0000
30	0	0	0	0.0000
TOTAL	32	4	36	11.1111

MUX LINK SIMULATOR RUN 1528 PAGE 1 OF 4. 20:33 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	5	1	6	16.6667
2	4	0	4	0.0000
3	3	0	3	0.0000
4	4	0	4	0.0000
5	3	0	3	0.0000
6	1	0	1	0.0000
7	0	0	0	0.0000
8	4	0	4	0.0000
9	3	0	3	0.0000
10	3	1	4	25.0000
11	5	0	5	0.0000
12	2	0	2	0.0000
13	4	0	4	0.0000
14	2	0	2	0.0000
15	4	0	4	0.0000
16	2	0	2	0.0000
17	0	0	0	0.0000
18	1	0	1	0.0000
19	1	0	1	0.0000
20	3	0	3	0.0000
21	2	0	2	0.0000
22	0	0	0	0.0000
23	3	0	3	0.0000
24	5	0	5	0.0000
25	3	0	3	0.0000
26	3	0	3	0.0000
27	1	0	1	0.0000
28	1	0	1	0.0000
29	1	0	1	0.0000
30	0	1	1	100.0000

MUX LINK SIMULATOR RUN 1528 PAGE 2 OF 4. 20:33 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	4	0	4	0.0000
32	0	0	0	0.0000
33	0	1	1	100.0000
34	2	0	2	0.0000
35	0	1	1	100.0000
36	2	0	2	0.0000
37	3	0	3	0.0000
38	1	0	1	0.0000
39	3	0	3	0.0000
40	0	0	0	0.0000
41	2	1	3	33.3333
42	2	0	2	0.0000
43	2	0	2	0.0000
44	1	0	1	0.0000
45	3	0	3	0.0000
46	3	0	3	0.0000
47	1	1	2	50.0000
48	4	0	4	0.0000
49	4	0	4	0.0000
50	1	1	2	50.0000
51	3	0	3	0.0000
52	1	0	1	0.0000
53	2	0	2	0.0000
54	4	0	4	0.0000
55	5	0	5	0.0000
56	4	0	4	0.0000
57	1	0	1	0.0000
58	3	1	4	25.0000
59	2	0	2	0.0000
60	1	0	1	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	0	0	0	0.0000
62	2	0	2	0.0000
63	2	0	2	0.0000
64	3	0	3	0.0000
65	1	0	1	0.0000
66	2	1	3	33.3333
67	0	1	1	100.0000
68	1	2	3	66.6667
69	1	1	2	50.0000
70	0	0	0	0.0000
71	0	0	0	0.0000
72	2	0	2	0.0000
73	4	0	4	0.0000
74	1	1	2	50.0000
75	1	0	1	0.0000
76	0	0	0	0.0000
77	2	0	2	0.0000
78	4	0	4	0.0000
79	0	1	1	100.0000
80	1	0	1	0.0000
81	1	0	1	0.0000
82	0	0	0	0.0000
83	3	0	3	0.0000
84	3	0	3	0.0000
85	4	0	4	0.0000
86	2	1	3	33.3333
87	2	0	2	0.0000
88	1	0	1	0.0000
89	4	0	4	0.0000
90	1	0	1	0.0000



MUX LINK SIMULATOR RUN 1528 PAGE 4 OF 4. 20:33 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	2	0	2	0.0000
92	5	0	5	0.0000
93	1	0	1	0.0000
94	2	0	2	0.0000
95	2	0	2	0.0000
96	2	0	2	0.0000
97	3	0	3	0.0000
98	5	0	5	0.0000
99	1	0	1	0.0000
100	2	0	2	0.0000
101	1	0	1	0.0000
102	0	0	0	0.0000
103	2	1	3	33.3333
104	2	0	2	0.0000
105	1	1	2	50.0000
106	1	0	1	0.0000
107	2	0	2	0.0000
108	1	0	1	0.0000
109	4	0	4	0.0000
110	1	0	1	0.0000
111	2	0	2	0.0000
112	1	0	1	0.0000
113	2	0	2	0.0000
114	4	0	4	0.0000
115	0	0	0	0.0000
116	4	0	4	0.0000
117	1	0	1	0.0000
118	1	1	2	50.0000
119	3	0	3	0.0000
120	1	1	2	50.0000
TOTAL	244	21	265	7.9245

MUX LINK SIMULATOR RUN 1538 PAGE 1 OF 4. 20:47 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	0	2	0.0000
2	4	0	4	0.0000
3	2	0	2	0.0000
4	4	0	4	0.0000
5	2	0	2	0.0000
6	0	0	0	0.0000
7	2	0	2	0.0000
8	2	1	3	33.3333
9	2	0	2	0.0000
10	2	0	2	0.0000
11	1	0	1	0.0000
12	3	0	3	0.0000
13	5	1	6	16.6667
14	2	0	2	0.0000
15	4	0	4	0.0000
16	3	0	3	0.0000
17	3	0	3	0.0000
18	1	0	1	0.0000
19	3	0	3	0.0000
20	4	0	4	0.0000
21	2	0	2	0.0000
22	1	0	1	0.0000
23	2	0	2	0.0000
24	2	0	2	0.0000
25	1	0	1	0.0000
26	1	0	1	0.0000
27	5	1	6	16.6667
28	0	1	1	100.0000
29	1	0	1	0.0000
30	3	1	4	25.0000

MUX LINK SIMULATOR RUN 1538 PAGE 2 OF 4. 20:47 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	2	0	2	0.0000
32	1	0	1	0.0000
33	4	1	5	20.0000
34	0	1	1	100.0000
35	2	0	2	0.0000
36	2	0	2	0.0000
37	3	0	3	0.0000
38	3	0	3	0.0000
39	3	0	3	0.0000
40	1	0	1	0.0000
41	1	0	1	0.0000
42	2	0	2	0.0000
43	2	0	2	0.0000
44	3	0	3	0.0000
45	3	0	3	0.0000
46	1	0	1	0.0000
47	1	0	1	0.0000
48	4	0	4	0.0000
49	2	0	2	0.0000
50	1	1	2	50.0000
51	3	1	4	25.0000
52	1	0	1	0.0000
53	3	1	4	25.0000
54	3	0	3	0.0000
55	2	0	2	0.0000
56	1	0	1	0.0000
57	4	0	4	0.0000
58	2	0	2	0.0000
59	1	1	2	50.0000
60	2	0	2	0.0000

MUX LINK SIMULATOR RUN 1538 PAGE 3 OF 4. 20:47 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	4	0	4	0.0000
62	2	0	2	0.0000
63	1	0	1	0.0000
64	0	0	0	0.0000
65	2	0	2	0.0000
66	3	0	3	0.0000
67	2	0	2	0.0000
68	1	0	1	0.0000
69	2	0	2	0.0000
70	2	0	2	0.0000
71	1	0	1	0.0000
72	2	1	3	33.3333
73	0	0	0	0.0000
74	1	1	2	50.0000
75	2	0	2	0.0000
76	4	2	6	33.3333
77	1	2	3	66.6667
78	0	0	0	0.0000
79	2	0	2	0.0000
80	0	0	0	0.0000
81	4	1	5	20.0000
82	2	0	2	0.0000
83	1	0	1	0.0000
84	3	1	4	25.0000
85	1	0	1	0.0000
86	3	0	3	0.0000
87	3	0	3	0.0000
88	3	0	3	0.0000
89	5	0	5	0.0000
90	3	0	3	0.0000

MUX LINK SIMULATOR RUN 1538 PAGE 4 OF 4. 20:47 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	4	0	4	0.0000
92	2	0	2	0.0000
93	1	0	1	0.0000
94	1	0	1	0.0000
95	2	0	2	0.0000
96	2	0	2	0.0000
97	1	0	1	0.0000
98	3	0	3	0.0000
99	5	0	5	0.0000
100	1	0	1	0.0000
101	2	0	2	0.0000
102	1	0	1	0.0000
103	0	0	0	0.0000
104	1	0	1	0.0000
105	1	0	1	0.0000
106	1	0	1	0.0000
107	1	0	1	0.0000
108	2	0	2	0.0000
109	2	0	2	0.0000
110	3	0	3	0.0000
111	2	0	2	0.0000
112	0	0	0	0.0000
113	0	0	0	0.0000
114	4	0	4	0.0000
115	0	0	0	0.0000
116	1	0	1	0.0000
117	3	0	3	0.0000
118	1	0	1	0.0000
119	0	0	0	0.0000
120	4	0	4	0.0000
TOTAL	243	19	262	7.2519

MUX LINK SIMULATOR RUN 1541 PAGE 1 OF 1. 21:01 22-AUG-78  
INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.100  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	8	8	100.0000
2	0	8	8	100.0000
3	0	4	4	100.0000
4	0	6	6	100.0000
5	0	3	3	100.0000
TOTAL	0	29	29	100.0000

MUX LINK SIMULATOR RUN 1561

PAGE 1 OF 1.

21:03 22-AUG-78  
INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	17	1	18	5.5556
2	14	0	14	0.0000
3	26	1	27	3.7037
4	17	3	20	15.0000
5	17	2	19	10.5263
TOTAL	91	7	98	7.1429

MUX LINK SIMULATOR RUN 1562 PAGE 1 OF 1. 21:06 22-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	16	4	20	20.0000
2	23	3	26	11.5385
3	20	2	22	9.0909
4	18	4	22	18.1818
5	9	2	11	18.1818
6	22	4	26	15.3846
7	21	0	21	0.0000
8	23	2	25	8.0000
9	16	4	20	20.0000
10	17	3	20	15.0000
	-----	-----	-----	-----
TOTAL	185	28	213	13.1455



MUX LINK SIMULATOR RUN 1572 PAGE 1 OF 1. 14:09 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	16	2	18	11.1111
2	26	0	26	0.0000
3	14	1	15	6.6667
4	20	2	22	9.0909
5	16	2	18	11.1111
6	22	1	23	4.3478
7	22	3	25	12.0000
8	21	1	22	4.5455
9	19	1	20	5.0000
10	25	0	25	0.0000
TOTAL	201	13	214	6.0748

MUX LINK SIMULATOR RUN 1582 PAGE 1 OF 1. 14:13 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	23	1	24	4.1667
2	26	1	27	3.7037
3	24	1	25	4.0000
4	21	2	23	8.6957
5	16	2	18	11.1111
6	14	0	14	0.0000
7	25	0	25	0.0000
8	22	0	22	0.0000
9	18	2	20	10.0000
10	22	0	22	0.0000
	-----	-----	-----	-----
TOTAL	211	9	220	4.0909

MUX LINK SIMULATOR RUN 1584 PAGE 1 OF 1. 14:16 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	18 2 20	10.0000
2	21 2 23	8.6957
3	24 1 25	4.0000
4	16 2 18	11.1111
5	23 2 25	8.0000
6	16 1 17	5.8824
7	14 2 16	12.5000
8	21 1 22	4.5455
9	17 4 21	19.0476
10	20 2 22	9.0909
11	23 4 27	14.8148
12	19 5 24	20.8333
13	19 1 20	5.0000
14	26 3 29	10.3448
15	16 2 18	11.1111
16	23 2 25	8.0000
17	17 1 18	5.5556
18	24 1 25	4.0000
19	17 2 19	10.5263
20	30 1 31	3.2258
TOTAL	----- 404 41 445	----- 9.2135

MUX LINK SIMULATOR RUN 1594 PAGE 1 OF 1. 14:20 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	27	0	27	0.0000
2	26	0	26	0.0000
3	18	1	19	5.2632
4	21	0	21	0.0000
5	23	1	24	4.1667
6	21	0	21	0.0000
7	22	0	22	0.0000
8	22	0	22	0.0000
9	24	0	24	0.0000
10	28	0	28	0.0000
11	17	0	17	0.0000
12	19	1	20	5.0000
13	25	0	25	0.0000
14	22	0	22	0.0000
15	32	0	32	0.0000
16	20	0	20	0.0000
17	16	0	16	0.0000
18	22	0	22	0.0000
19	22	1	23	4.3478
20	28	0	28	0.0000
TOTAL	455	4	459	0.8715

MUX LINK SIMULATOR RUN 1601 PAGE 1 OF 1. 14:24 23-AUG-78  
INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.900  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	21 1 22	4.5455
2	17 0 17	0.0000
3	19 1 20	5.0000
4	20 0 20	0.0000
5	19 1 20	5.0000
TOTAL	----- 96 3 99	----- 3.0303

MUX LINK SIMULATOR RUN 1602 PAGE 1 OF 1. 14:27 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	18	1	19	5.2632
2	21	1	22	4.5455
3	21	1	22	4.5455
4	18	0	18	0.0000
5	15	1	16	6.2500
6	18	1	19	5.2632
7	17	1	18	5.5556
8	19	1	20	5.0000
9	19	1	20	5.0000
10	17	0	17	0.0000
TOTAL	183	8	191	4.1885

MUX LINK SIMULATOR RUN 1612 PAGE 1 OF 1. 14:30 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 3000 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	1	21	4.7619
2	21	1	22	4.5455
3	21	1	22	4.5455
4	21	1	22	4.5455
5	19	1	20	5.0000
6	22	1	23	4.3478
7	22	1	23	4.3478
8	23	1	24	4.1667
9	20	1	21	4.7619
10	23	1	24	4.1667
TOTAL	212	10	222	4.5045

MUX LINK SIMULATOR RUN 1625 PAGE 1 OF 1. 14:33 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	1	23	4.3478
2	20	1	21	4.7619
3	21	1	22	4.5455
4	23	1	24	4.1667
5	22	1	23	4.3478
6	22	1	23	4.3478
7	21	1	22	4.5455
8	19	1	20	5.0000
9	20	1	21	4.7619
10	21	1	22	4.5455
11	22	1	23	4.3478
12	23	1	24	4.1667
13	22	1	23	4.3478
14	21	1	22	4.5455
15	19	0	19	0.0000
16	19	1	20	5.0000
17	17	1	18	5.5556
18	22	1	23	4.3478
19	19	1	20	5.0000
20	22	1	23	4.3478
21	22	1	23	4.3478
22	19	1	20	5.0000
23	21	1	22	4.5455
24	20	1	21	4.7619
25	19	1	20	5.0000
26	22	1	23	4.3478
27	18	1	19	5.2632
28	19	1	20	5.0000
29	19	1	20	5.0000
30	21	1	22	4.5455
TOTAL	617	29	646	4.4892



MUX LINK SIMULATOR RUN 1628 PAGE 1 OF 4. 14:38 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	1	21	4.7619
2	19	1	20	5.0000
3	16	2	18	11.1111
4	20	1	21	4.7619
5	18	1	19	5.2632
6	17	2	19	10.5263
7	20	2	22	9.0909
8	19	2	21	9.5238
9	18	0	18	0.0000
10	19	2	21	9.5238
11	17	3	20	15.0000
12	19	3	22	13.6364
13	19	3	22	13.6364
14	19	2	21	9.5238
15	19	3	22	13.6364
16	16	2	18	11.1111
17	19	2	21	9.5238
18	21	1	22	4.5455
19	19	2	21	9.5238
20	18	2	20	10.0000
21	13	2	15	13.3333
22	18	2	20	10.0000
23	18	2	20	10.0000
24	16	3	19	15.7895
25	19	2	21	9.5238
26	17	2	19	10.5263
27	19	3	22	13.6364
28	19	1	20	5.0000
29	20	2	22	9.0909
30	20	2	22	9.0909

MUX LINK SIMULATOR RUN 1628 PAGE 2 OF 4. 14:38 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	17	2	19	10.5263
32	18	2	20	10.0000
33	17	1	18	5.5556
34	20	2	22	9.0909
35	19	2	21	9.5238
36	16	2	18	11.1111
37	17	2	19	10.5263
38	20	3	23	13.0435
39	18	2	20	10.0000
40	16	3	19	15.7895
41	20	2	22	9.0909
42	18	2	20	10.0000
43	20	2	22	9.0909
44	21	2	23	8.6957
45	18	3	21	14.2857
46	20	2	22	9.0909
47	19	2	21	9.5238
48	18	1	19	5.2632
49	17	3	20	15.0000
50	20	2	22	9.0909
51	17	2	19	10.5263
52	16	3	19	15.7895
53	17	2	19	10.5263
54	20	2	22	9.0909
55	18	2	20	10.0000
56	18	2	20	10.0000
57	21	2	23	8.6957
58	19	3	22	13.6364
59	19	3	22	13.6364
60	18	2	20	10.0000

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	19	2	21	9.5238
62	21	1	22	4.5455
63	20	2	22	9.0909
64	15	3	18	16.6667
65	18	1	19	5.2632
66	19	2	21	9.5238
67	18	2	20	10.0000
68	19	1	20	5.0000
69	20	2	22	9.0909
70	19	1	20	5.0000
71	21	1	22	4.5455
72	22	0	22	0.0000
73	20	1	21	4.7619
74	18	4	22	18.1818
75	16	3	19	15.7895
76	19	3	22	13.6364
77	18	2	20	10.0000
78	19	2	21	9.5238
79	19	3	22	13.6364
80	20	2	22	9.0909
81	19	2	21	9.5238
82	16	3	19	15.7895
83	17	3	20	15.0000
84	17	2	19	10.5263
85	16	4	20	20.0000
86	17	1	18	5.5556
87	17	2	19	10.5263
88	20	3	23	13.0435
89	17	3	20	15.0000
90	19	3	22	13.6364

MUX LINK SIMULATOR RUN 1628 PAGE 4 OF 4. 14:38 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	16	2	18	11.1111
92	16	3	19	15.7895
93	17	3	20	15.0000
94	18	3	21	14.2857
95	18	2	20	10.0000
96	17	3	20	15.0000
97	17	3	20	15.0000
98	17	2	19	10.5263
99	17	2	19	10.5263
100	17	3	20	15.0000
101	19	3	22	13.6364
102	16	3	19	15.7895
103	16	3	19	15.7895
104	17	4	21	19.0476
105	20	2	22	9.0909
106	19	3	22	13.6364
107	19	3	22	13.6364
108	20	3	23	13.0435
109	20	3	23	13.0435
110	16	4	20	20.0000
111	18	3	21	14.2857
112	17	2	19	10.5263
113	15	4	19	21.0526
114	18	3	21	14.2857
115	18	2	20	10.0000
116	17	4	21	19.0476
117	19	4	23	17.3913
118	18	3	21	14.2857
119	16	3	19	15.7895
120	16	3	19	15.7895
TOTAL	2182	275	2457	11.1925

MUX LINK SIMULATOR RUN 1638 PAGE 1 OF 4. 14:52 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRBB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	18	2	20	10.0000
2	21	1	22	4.5455
3	21	1	22	4.5455
4	20	1	21	4.7619
5	20	2	22	9.0909
6	18	1	19	5.2632
7	18	2	20	10.0000
8	19	3	22	13.6364
9	21	2	23	8.6957
10	18	2	20	10.0000
11	18	2	20	10.0000
12	19	2	21	9.5238
13	17	4	21	19.0476
14	19	2	21	9.5238
15	20	1	21	4.7619
16	20	1	21	4.7619
17	17	3	20	15.0000
18	19	3	22	13.6364
19	16	2	18	11.1111
20	18	2	20	10.0000
21	17	2	19	10.5263
22	20	2	22	9.0909
23	19	3	22	13.6364
24	18	2	20	10.0000
25	19	3	22	13.6364
26	15	3	18	16.6667
27	19	2	21	9.5238
28	20	1	21	4.7619
29	16	2	18	11.1111
30	19	2	21	9.5238

MUX LINK SIMULATOR RUN 1638 PAGE 2 OF 4. 14:52 23-AUG-78  
INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
NO OF SENSORS: 120  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.900  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	18	2	20	10.0000
32	17	2	19	10.5263
33	17	2	19	10.5263
34	17	2	19	10.5263
35	18	2	20	10.0000
36	17	2	19	10.5263
37	21	2	23	8.6957
38	19	2	21	9.5238
39	18	2	20	10.0000
40	18	2	20	10.0000
41	18	2	20	10.0000
42	17	3	20	15.0000
43	20	2	22	9.0909
44	19	2	21	9.5238
45	17	3	20	15.0000
46	17	3	20	15.0000
47	19	4	23	17.3913
48	20	1	21	4.7619
49	17	5	22	22.7273
50	18	2	20	10.0000
51	19	2	21	9.5238
52	20	2	22	9.0909
53	19	2	21	9.5238
54	20	1	21	4.7619
55	19	2	21	9.5238
56	18	2	20	10.0000
57	19	1	20	5.0000
58	17	2	19	10.5263
59	18	1	19	5.2632
60	19	2	21	9.5238

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRGB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	21	1	22	4.5455
62	20	1	21	4.7619
63	20	1	21	4.7619
64	20	1	21	4.7619
65	22	1	23	4.3478
66	19	1	20	5.0000
67	20	3	23	13.0435
68	20	1	21	4.7619
69	19	2	21	9.5238
70	18	3	21	14.2857
71	20	2	22	9.0909
72	20	1	21	4.7619
73	18	2	20	10.0000
74	20	2	22	9.0909
75	20	1	21	4.7619
76	20	2	22	9.0909
77	20	2	22	9.0909
78	21	2	23	8.6957
79	17	2	19	10.5263
80	19	2	21	9.5238
81	17	3	20	15.0000
82	19	2	21	9.5238
83	17	3	20	15.0000
84	19	2	21	9.5238
85	19	2	21	9.5238
86	20	3	23	13.0435
87	18	2	20	10.0000
88	21	2	23	8.6957
89	19	2	21	9.5238
90	14	6	20	30.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	17	3	20	15.0000
92	15	4	19	21.0526
93	17	2	19	10.5263
94	18	2	20	10.0000
95	16	3	19	15.7895
96	17	2	19	10.5263
97	19	1	20	5.0000
98	20	2	22	9.0909
99	15	3	18	16.6667
100	18	2	20	10.0000
101	18	1	19	5.2632
102	17	3	20	15.0000
103	17	3	20	15.0000
104	20	2	22	9.0909
105	18	2	20	10.0000
106	18	4	22	18.1818
107	19	3	22	13.6364
108	17	3	20	15.0000
109	19	2	21	9.5238
110	18	3	21	14.2857
111	20	2	22	9.0909
112	16	1	17	5.8824
113	17	3	20	15.0000
114	17	2	19	10.5263
115	18	2	20	10.0000
116	16	2	18	11.1111
117	17	2	19	10.5263
118	21	1	22	4.5455
119	18	2	20	10.0000
120	17	1	18	5.5556
TOTAL	2216	253	2469	10.2471



MUX LINK SIMULATOR RUN 1641 PAGE 1 OF 1. 15:06 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	212	212	100.0000
2	0	207	207	100.0000
3	0	213	213	100.0000
4	0	213	213	100.0000
5	0	207	207	100.0000
TOTAL	0	1052	1052	100.0000

MUX LINK SIMULATOR RUN 1661 PAGE 1 OF 1. 15:09 23-AUG-78  
INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.900  
LENGTH OF RUN: 2.00 HRS

SENSOR	-----MESSAGES-----			PERCENT
NUMBER	SENT	DROPPED	TOTAL	DROPPED
1	206	7	213	3.2864
2	207	7	214	3.2710
3	212	6	218	2.7523
4	206	3	209	1.4354
5	213	6	219	2.7397
-----				
TOTAL	1044	29	1073	2.7027

MUX LINK SIMULATOR RUN 1662 PAGE 1 OF 1. 15:12 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	135	73	208	35.0962
2	125	76	201	37.8109
3	120	76	196	38.7755
4	132	73	205	35.6098
5	141	71	212	33.4906
6	117	84	201	41.7910
7	134	63	197	31.9797
8	122	78	200	39.0000
9	127	75	202	37.1287
10	122	76	198	38.3838
	-----	-----	-----	-----
TOTAL	1275	745	2020	36.5812

MUX LINK SIMULATOR RUN 1672 PAGE 1 OF 1. 15:15 23-AUG-78  
 INT.. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRBB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	130	84	214	39.2523
2	113	87	200	43.5000
3	128	90	218	41.2844
4	117	90	207	43.4783
5	123	92	215	42.7907
6	122	90	212	42.4528
7	122	90	212	42.4528
8	123	86	209	41.1483
9	115	85	200	42.5000
10	117	86	203	42.3645
	-----	-----	-----	-----
TOTAL	1210	880	2090	42.1053

MUX LINK SIMULATOR RUN 1682 PAGE 1 OF 1. 15:18 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	214	3	217	1.3825
2	215	3	218	1.3761
3	207	4	211	1.8957
4	217	4	221	1.8100
5	216	3	219	1.3699
6	219	1	220	0.4545
7	210	3	213	1.4085
8	205	3	208	1.4423
9	208	4	212	1.8868
10	210	4	214	1.8692
TOTAL	2121	32	2153	1.4863

MUX LINK SIMULATOR RUN 1684 PAGE 1 OF 1. 15:21 23-AUG-78  
 INT. SENSORS, LINEAR POLLING, EVEN INTERVAL TURNON, RANDOM DETECTION

RUN DATA:

NO OF SENSORS; 20  
 SENSOR PERIOD; 30. SEC  
 SENSOR BUFFER; 10240 BITS  
 TRANSMIT RATE; 4800 BPS  
 BITS PER POLL; 240  
 PROB. OF TGT.; 0.900  
 LENGTH OF RUN; 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	127	83	210	39.5238
2	107	86	193	44.5596
3	125	79	204	38.7255
4	126	82	208	39.4231
5	118	93	211	44.0758
6	122	77	199	38.6935
7	122	82	204	40.1961
8	122	83	205	40.4878
9	123	82	205	40.0000
10	119	85	204	41.6667
11	135	66	201	32.8358
12	113	100	213	46.9484
13	122	83	205	40.4878
14	132	74	206	35.9223
15	116	100	216	46.2963
16	116	91	207	43.9614
17	132	81	213	38.0282
18	115	92	207	44.4444
19	127	80	207	38.6473
20	121	86	207	41.5459
TOTAL	2440	1685	4125	40.8485

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	125	81	206	39.3204
2	128	77	205	37.5610
3	118	82	200	41.0000
4	123	80	203	39.4089
5	125	84	209	40.1914
6	124	85	209	40.6699
7	128	74	202	36.6337
8	122	87	209	41.6268
9	118	86	204	42.1569
10	120	92	212	43.3962
11	125	79	204	38.7255
12	123	78	201	38.8060
13	120	84	204	41.1765
14	140	71	211	33.6493
15	111	93	204	45.5882
16	117	90	207	43.4783
17	130	85	215	39.5349
18	113	89	202	44.0594
19	128	74	202	36.6337
20	133	85	218	38.9908
TOTAL	2471	1656	4127	40.1260

MUX LINK SIMULATOR RUN 1701 PAGE 1 OF 1. 18:39 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	7	0	7	0.0000
2	7	1	8	12.5000
3	10	0	10	0.0000
4	6	1	7	14.2857
5	3	1	4	25.0000
	-----	-----	-----	-----
TOTAL	33	3	36	8.3333



MUX LINK SIMULATOR RUN 1702 PAGE 1 OF 1. 18:42 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	10	1	11	9.0909
2	10	0	10	0.0000
3	12	2	14	14.2857
4	10	0	10	0.0000
5	9	3	12	25.0000
6	10	1	11	9.0909
7	6	1	7	14.2857
8	9	1	10	10.0000
9	9	1	10	10.0000
10	8	0	8	0.0000
TOTAL	93	10	103	9.7087

MUX LINK SIMULATOR RUN 1712 PAGE 1 OF 1. 18:44 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	10	1	11	9.0909
2	8	1	9	11.1111
3	9	0	9	0.0000
4	10	1	11	9.0909
5	6	0	6	0.0000
6	9	1	10	10.0000
7	6	1	7	14.2857
8	9	0	9	0.0000
9	9	1	10	10.0000
10	10	0	10	0.0000
-----				
TOTAL	86	6	92	6.5217

MUX LINK SIMULATOR RUN 1725 PAGE 1 OF 1. 18:48 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	11	1	12	8.3333
2	18	0	18	0.0000
3	12	0	12	0.0000
4	10	0	10	0.0000
5	15	1	16	6.2500
6	10	0	10	0.0000
7	11	0	11	0.0000
8	6	1	7	14.2857
9	11	1	12	8.3333
10	12	0	12	0.0000
11	10	1	11	9.0909
12	9	1	10	10.0000
13	15	1	16	6.2500
14	12	0	12	0.0000
15	7	0	7	0.0000
16	14	0	14	0.0000
17	11	0	11	0.0000
18	9	0	9	0.0000
19	12	0	12	0.0000
20	12	1	13	7.6923
21	10	1	11	9.0909
22	12	1	13	7.6923
23	8	1	9	11.1111
24	12	0	12	0.0000
25	12	1	13	7.6923
26	10	1	11	9.0909
27	7	0	7	0.0000
28	9	1	10	10.0000
29	11	0	11	0.0000
30	12	0	12	0.0000
TOTAL	330	14	344	4.0698

MUX LINK SIMULATOR RUN 1728 PAGE 1 OF 4. 18:53 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	9	1	10	10.0000
2	13	1	14	7.1429
3	10	2	12	16.6667
4	8	2	10	20.0000
5	9	0	9	0.0000
6	7	3	10	30.0000
7	11	2	13	15.3846
8	13	2	15	13.3333
9	11	2	13	15.3846
10	10	2	12	16.6667
11	7	0	7	0.0000
12	7	1	8	12.5000
13	8	2	10	20.0000
14	7	1	8	12.5000
15	7	1	8	12.5000
16	11	1	12	8.3333
17	8	1	9	11.1111
18	6	1	7	14.2857
19	8	0	8	0.0000
20	12	1	13	7.6923
21	6	3	9	33.3333
22	12	1	13	7.6923
23	6	1	7	14.2857
24	11	1	12	8.3333
25	7	0	7	0.0000
26	10	1	11	9.0909
27	11	1	12	8.3333
28	13	1	14	7.1429
29	11	1	12	8.3333
30	13	1	14	7.1429

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	9	3	12	25.0000
32	9	1	10	10.0000
33	10	1	11	9.0909
34	9	2	11	18.1818
35	9	2	11	18.1818
36	12	1	13	7.6923
37	9	4	13	30.7692
38	10	0	10	0.0000
39	10	3	13	23.0769
40	11	0	11	0.0000
41	10	1	11	9.0909
42	10	1	11	9.0909
43	11	1	12	8.3333
44	6	1	7	14.2857
45	6	2	8	25.0000
46	5	3	8	37.5000
47	9	2	11	18.1818
48	9	1	10	10.0000
49	10	2	12	16.6667
50	11	1	12	8.3333
51	5	0	5	0.0000
52	7	0	7	0.0000
53	6	0	6	0.0000
54	11	1	12	8.3333
55	8	0	8	0.0000
56	10	0	10	0.0000
57	11	1	12	8.3333
58	9	2	11	18.1818
59	11	1	12	8.3333
60	14	2	16	12.5000

MUX LINK SIMULATOR RUN 1728 PAGE 3 OF 4. 18:53 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	8	3	11	27.2727
62	5	1	6	16.6667
63	11	1	12	8.3333
64	8	0	8	0.0000
65	12	0	12	0.0000
66	14	0	14	0.0000
67	9	3	12	25.0000
68	6	1	7	14.2857
69	10	1	11	9.0909
70	11	1	12	8.3333
71	8	1	9	11.1111
72	8	1	9	11.1111
73	6	1	7	14.2857
74	6	2	8	25.0000
75	13	1	14	7.1429
76	10	0	10	0.0000
77	10	1	11	9.0909
78	13	0	13	0.0000
79	6	2	8	25.0000
80	8	0	8	0.0000
81	10	2	12	16.6667
82	9	2	11	18.1818
83	8	1	9	11.1111
84	10	1	11	9.0909
85	9	2	11	18.1818
86	8	1	9	11.1111
87	10	2	12	16.6667
88	13	2	15	13.3333
89	8	0	8	0.0000
90	6	2	8	25.0000

MUX LINK SIMULATOR RUN 1728 PAGE 4 OF 4. 18:53 8-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	10	0	10	0.0000
92	10	2	12	16.6667
93	10	0	10	0.0000
94	9	2	11	18.1818
95	10	1	11	9.0909
96	8	2	10	20.0000
97	6	3	9	33.3333
98	13	2	15	13.3333
99	7	1	8	12.5000
100	9	1	10	10.0000
101	11	3	14	21.4286
102	13	2	15	13.3333
103	9	0	9	0.0000
104	10	2	12	16.6667
105	10	1	11	9.0909
106	9	2	11	18.1818
107	10	3	13	23.0769
108	7	2	9	22.2222
109	6	2	8	25.0000
110	14	0	14	0.0000
111	11	0	11	0.0000
112	11	1	12	8.3333
113	5	1	6	16.6667
114	9	1	10	10.0000
115	12	2	14	14.2857
116	10	2	12	16.6667
117	11	2	13	15.3846
118	9	0	9	0.0000
119	7	0	7	0.0000
120	11	0	11	0.0000
TOTAL	1119	151	1270	11.8898

MUX LINK SIMULATOR RUN 1738 PAGE 1 OF 4. 19:07 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	9	3	12	25.0000
2	10	1	11	9.0909
3	11	1	12	8.3333
4	8	1	9	11.1111
5	8	0	8	0.0000
6	6	0	6	0.0000
7	10	1	11	9.0909
8	9	2	11	18.1818
9	11	1	12	8.3333
10	8	3	11	27.2727
11	15	2	17	11.7647
12	4	3	7	42.8571
13	8	3	11	27.2727
14	8	2	10	20.0000
15	7	4	11	36.3636
16	8	3	11	27.2727
17	9	1	10	10.0000
18	10	2	12	16.6667
19	9	2	11	18.1818
20	9	1	10	10.0000
21	12	2	14	14.2857
22	9	3	12	25.0000
23	5	3	8	37.5000
24	7	1	8	12.5000
25	9	2	11	18.1818
26	7	1	8	12.5000
27	8	1	9	11.1111
28	9	3	12	25.0000
29	12	1	13	7.6923
30	10	1	11	9.0909



MUX LINK SIMULATOR RUN 1738 PAGE 2 OF 4. 19:07 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	10	2	12	16.6667
32	9	3	12	25.0000
33	12	2	14	14.2857
34	7	4	11	36.3636
35	7	2	9	22.2222
36	8	0	8	0.0000
37	9	2	11	18.1818
38	11	1	12	8.3333
39	6	5	11	45.4545
40	6	3	9	33.3333
41	13	2	15	13.3333
42	10	1	11	9.0909
43	7	2	9	22.2222
44	9	4	13	30.7692
45	6	3	9	33.3333
46	15	0	15	0.0000
47	9	3	12	25.0000
48	9	1	10	10.0000
49	12	0	12	0.0000
50	7	4	11	36.3636
51	9	3	12	25.0000
52	10	4	14	28.5714
53	7	0	7	0.0000
54	11	2	13	15.3846
55	8	1	9	11.1111
56	7	2	9	22.2222
57	6	3	9	33.3333
58	8	2	10	20.0000
59	6	2	8	25.0000
60	11	2	13	15.3846

MUX LINK SIMULATOR RUN 1738 PAGE 3 OF 4. 19:07 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	10	1	11	9.0909
62	8	1	9	11.1111
63	7	3	10	30.0000
64	11	2	13	15.3846
65	10	3	13	23.0769
66	8	2	10	20.0000
67	10	1	11	9.0909
68	7	3	10	30.0000
69	6	2	8	25.0000
70	4	3	7	42.8571
71	7	2	9	22.2222
72	7	3	10	30.0000
73	8	4	12	33.3333
74	7	3	10	30.0000
75	5	4	9	44.4444
76	9	3	12	25.0000
77	5	1	6	16.6667
78	8	2	10	20.0000
79	12	4	16	25.0000
80	6	5	11	45.4545
81	8	2	10	20.0000
82	9	1	10	10.0000
83	9	0	9	0.0000
84	7	3	10	30.0000
85	9	1	10	10.0000
86	8	6	14	42.8571
87	8	4	12	33.3333
88	9	2	11	18.1818
89	7	4	11	36.3636
90	12	3	15	20.0000

MUX LINK SIMULATOR RUN 1738 PAGE 4 OF 4. 19:07 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	8	4	12	33.3333
92	7	3	10	30.0000
93	6	3	9	33.3333
94	11	3	14	21.4286
95	5	3	8	37.5000
96	6	4	10	40.0000
97	10	3	13	23.0769
98	6	2	8	25.0000
99	8	2	10	20.0000
100	9	1	10	10.0000
101	11	1	12	8.3333
102	10	2	12	16.6667
103	6	2	8	25.0000
104	10	4	14	28.5714
105	8	5	13	38.4615
106	10	5	15	33.3333
107	9	3	12	25.0000
108	6	2	8	25.0000
109	7	1	8	12.5000
110	7	1	8	12.5000
111	7	1	8	12.5000
112	8	3	11	27.2727
113	9	2	11	18.1818
114	11	3	14	21.4286
115	12	3	15	20.0000
116	10	3	13	23.0769
117	9	0	9	0.0000
118	11	2	13	15.3846
119	9	2	11	18.1818
120	8	3	11	27.2727
TOTAL	1025	273	1298	21.0324

MUX LINK SIMULATOR RUN 1741 PAGE 1 OF 1. 19:21 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	106	106	100.0000
2	0	105	105	100.0000
3	0	106	106	100.0000
4	0	96	96	100.0000
5	0	103	103	100.0000
-----				
TOTAL	0	516	516	100.0000

MUX LINK SIMULATOR RUN 1761 PAGE 1 OF 1. 19:24 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	85	28	113	24.7788
2	88	26	114	22.8070
3	83	26	109	23.8532
4	93	22	115	19.1304
5	88	26	114	22.8070
	-----	-----	-----	-----
TOTAL	437	128	565	22.6549

MUX LINK SIMULATOR RUN 1762 PAGE 1 OF 1. 19:27 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	67	20	87	22.9885
2	73	23	96	23.9583
3	61	26	87	29.8851
4	78	19	97	19.5876
5	76	22	98	22.4490
6	76	23	99	23.2323
7	80	15	95	15.7895
8	74	23	97	23.7113
9	73	19	92	20.6522
10	80	18	98	18.3673
TOTAL	738	208	946	21.9873

MUX LINK SIMULATOR RUN 1772 PAGE 1 OF 1. 19:30 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	77	27	104	25.9615
2	82	28	110	25.4545
3	69	31	100	31.0000
4	63	36	99	36.3636
5	76	28	104	26.9231
6	67	29	96	30.2083
7	75	38	113	33.6283
8	59	26	85	30.5882
9	80	26	106	24.5283
10	67	33	100	33.0000
TOTAL	715	302	1017	29.6952

MUX LINK SIMULATOR RUN 1782 PAGE 1 OF 1. 19:34 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	100	6	106	5.6604
2	98	5	103	4.8544
3	111	6	117	5.1282
4	119	6	125	4.8000
5	92	6	98	6.1224
6	100	5	105	4.7619
7	100	8	108	7.4074
8	110	6	116	5.1724
9	112	7	119	5.8824
10	108	3	111	2.7027
TOTAL	1050	58	1108	5.2347



MUX LINK SIMULATOR RUN - 1784      PAGE 1 OF 1.      19:37    5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS    TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS:      20  
 SENSOR PERIOD:      30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL:      240  
 PRBB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	47	47	94	50.0000
2	37	50	87	57.4713
3	44	64	108	59.2593
4	51	44	95	46.3158
5	26	58	84	69.0476
6	42	54	96	56.2500
7	53	43	96	44.7917
8	48	59	107	55.1402
9	42	45	87	51.7241
10	43	52	95	54.7368
11	43	55	98	56.1224
12	47	45	92	48.9130
13	48	55	103	53.3981
14	50	55	105	52.3810
15	38	63	101	62.3762
16	46	48	94	51.0638
17	44	56	100	56.0000
18	39	52	91	57.1429
19	46	51	97	52.5773
20	38	53	91	58.2418
TOTAL	872	1049	1921	54.6070

MUX LINK SIMULATOR RUN 1794 PAGE 1 OF 1. 19:41 8-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	50	51	101	50.4950
2	40	40	80	50.0000
3	41	54	95	56.8421
4	40	51	91	56.0440
5	34	53	87	60.9195
6	49	50	99	50.5051
7	38	49	87	56.3218
8	47	49	96	51.0417
9	49	51	100	51.0000
10	36	51	87	58.6207
11	33	57	90	63.3333
12	45	41	86	47.6744
13	34	57	91	62.6374
14	42	48	90	53.3333
15	49	59	108	54.6296
16	44	52	96	54.1667
17	37	61	98	62.2449
18	53	48	101	47.5248
19	38	55	93	59.1398
20	33	63	96	65.6250
-----				
TOTAL	832	1040	1872	55.5556

MUX LINK SIMULATOR RUN 1801 PAGE 1 OF 1. 19:51 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	19	1	20	5.0000
2	19	1	20	5.0000
3	21	2	23	8.6957
4	18	2	20	10.0000
5	20	2	22	9.0909
-----				
TOTAL	97	8	105	7.6190

MUX LINK SIMULATOR RUN 1802 PAGE 1 OF 1. 19:54 8-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	21	1	22	4.5455
2	18	1	19	5.2632
3	20	1	21	4.7619
4	19	2	21	9.5238
5	22	2	24	8.3333
6	22	2	24	8.3333
7	18	2	20	10.0000
8	20	1	21	4.7619
9	19	2	21	9.5238
10	16	2	18	11.1111
	-----	-----	-----	-----
TOTAL	195	16	211	7.5829

MUX LINK SIMULATOR RUN 1812 PAGE 1 OF 1. 19:57 5-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 3000 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	19	1	20	5.0000
2	19	1	20	5.0000
3	22	1	23	4.3478
4	21	1	22	4.5455
5	18	1	19	5.2632
6	22	0	22	0.0000
7	19	1	20	5.0000
8	21	1	22	4.5455
9	21	1	22	4.5455
10	22	1	23	4.3478
TOTAL	204	9	213	4.2254

MUX LINK SIMULATOR RUN 1825 PAGE 1 OF 1. 14:22 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	17	2	19	10.5263
2	17	1	18	5.5556
3	20	2	22	9.0909
4	20	1	21	4.7619
5	20	1	21	4.7619
6	19	0	19	0.0000
7	21	1	22	4.5455
8	22	1	23	4.3478
9	21	1	22	4.5455
10	18	1	19	5.2632
11	23	0	23	0.0000
12	22	1	23	4.3478
13	23	1	24	4.1667
14	18	1	19	5.2632
15	18	0	18	0.0000
16	22	1	23	4.3478
17	21	1	22	4.5455
18	22	1	23	4.3478
19	20	1	21	4.7619
20	20	0	20	0.0000
21	20	1	21	4.7619
22	20	1	21	4.7619
23	17	2	19	10.5263
24	20	2	22	9.0909
25	19	2	21	9.5238
26	21	2	23	8.6957
27	20	2	22	9.0909
28	20	2	22	9.0909
29	21	1	22	4.5455
30	21	2	23	8.6957
TOTAL	603	35	638	5.4859

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	14	7	21	33.3333
2	11	6	17	35.2941
3	14	5	19	26.3158
4	12	6	18	33.3333
5	17	4	21	19.0476
6	12	10	22	45.4545
7	14	5	19	26.3158
8	11	9	20	45.0000
9	10	9	19	47.3684
10	14	7	21	33.3333
11	12	6	18	33.3333
12	13	7	20	35.0000
13	14	5	19	26.3158
14	18	3	21	14.2857
15	13	7	20	35.0000
16	11	8	19	42.1053
17	15	7	22	31.8182
18	15	4	19	21.0526
19	12	8	20	40.0000
20	12	8	20	40.0000
21	15	8	23	34.7826
22	13	10	23	43.4783
23	15	5	20	25.0000
24	14	5	19	26.3158
25	13	9	22	40.9091
26	13	9	22	40.9091
27	13	9	22	40.9091
28	14	7	21	33.3333
29	13	6	19	31.5789
30	16	5	21	23.8095

MUX LINK SIMULATOR RUN 1828 PAGE 2 OF 4. 14:27 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	13	6	19	31.5789
32	14	5	19	26.3158
33	10	8	18	44.4444
34	11	10	21	47.6190
35	15	6	21	28.5714
36	16	5	21	23.8095
37	12	7	19	36.8421
38	12	8	20	40.0000
39	12	6	18	33.3333
40	13	7	20	35.0000
41	16	6	22	27.2727
42	13	10	23	43.4783
43	13	5	18	27.7778
44	13	8	21	38.0952
45	14	5	19	26.3158
46	13	5	18	27.7778
47	12	8	20	40.0000
48	12	9	21	42.8571
49	14	6	20	30.0000
50	19	3	22	13.6364
51	12	8	20	40.0000
52	10	9	19	47.3684
53	9	7	16	43.7500
54	15	5	20	25.0000
55	14	5	19	26.3158
56	15	6	21	28.5714
57	14	6	20	30.0000
58	12	7	19	36.8421
59	11	8	19	42.1053
60	13	7	20	35.0000



MUX LINK SIMULATOR RUN 1828 PAGE 3 OF 4. 14:27 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	12	6	18	33.3333
62	14	7	21	33.3333
63	15	7	22	31.8182
64	11	8	19	42.1053
65	11	9	20	45.0000
66	15	6	21	28.5714
67	14	9	23	39.1304
68	11	8	19	42.1053
69	17	3	20	15.0000
70	15	7	22	31.8182
71	10	12	22	54.5455
72	11	10	21	47.6190
73	15	5	20	25.0000
74	11	5	16	31.2500
75	15	6	21	28.5714
76	15	5	20	25.0000
77	10	9	19	47.3684
78	15	6	21	28.5714
79	14	7	21	33.3333
80	14	5	19	26.3158
81	16	5	21	23.8095
82	16	4	20	20.0000
83	12	9	21	42.8571
84	13	8	21	38.0952
85	14	7	21	33.3333
86	15	7	22	31.8182
87	15	6	21	28.5714
88	12	9	21	42.8571
89	15	5	20	25.0000
90	16	7	23	30.4348

MUX LINK SIMULATOR RUN 1828 PAGE 4 OF 4. 14:27 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	15	5	20	25.0000
92	12	9	21	42.8571
93	14	6	20	30.0000
94	10	6	16	37.5000
95	12	7	19	36.8421
96	12	7	19	36.8421
97	16	5	21	23.8095
98	15	7	22	31.8182
99	13	8	21	38.0952
100	13	5	18	27.7778
101	15	7	22	31.8182
102	15	6	21	28.5714
103	15	7	22	31.8182
104	13	8	21	38.0952
105	10	7	17	41.1765
106	16	5	21	23.8095
107	17	2	19	10.5263
108	11	8	19	42.1053
109	14	7	21	33.3333
110	13	7	20	35.0000
111	13	6	19	31.5789
112	15	7	22	31.8182
113	15	6	21	28.5714
114	13	6	19	31.5789
115	14	6	20	30.0000
116	13	8	21	38.0952
117	13	9	22	40.9091
118	13	8	21	38.0952
119	16	6	22	27.2727
120	15	7	22	31.8182
TOTAL	1615	810	2425	33.4021

MUX LINK SIMULATOR RUN 1838 PAGE 1 OF 4. 14:42 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	13	6	19	31.5789
2	16	4	20	20.0000
3	12	6	18	33.3333
4	18	5	23	21.7391
5	13	9	22	40.9091
6	18	4	22	18.1818
7	11	8	19	42.1053
8	17	3	20	15.0000
9	13	9	22	40.9091
10	14	7	21	33.3333
11	14	2	16	12.5000
12	15	5	20	25.0000
13	13	8	21	38.0952
14	13	6	19	31.5789
15	13	4	17	23.5294
16	16	4	20	20.0000
17	13	6	19	31.5789
18	14	6	20	30.0000
19	15	6	21	28.5714
20	15	7	22	31.8182
21	13	7	20	35.0000
22	18	4	22	18.1818
23	14	7	21	33.3333
24	15	6	21	28.5714
25	14	8	22	36.3636
26	13	4	17	23.5294
27	16	5	21	23.8095
28	14	8	22	36.3636
29	17	6	23	26.0870
30	16	6	22	27.2727

MUX LINK SIMULATOR RUN 1838 PAGE 2 OF 4. 14:42 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	15	6	21	28.5714
32	12	8	20	40.0000
33	14	9	23	39.1304
34	13	6	19	31.5789
35	15	5	20	25.0000
36	11	8	19	42.1053
37	15	6	21	28.5714
38	15	4	19	21.0526
39	14	7	21	33.3333
40	15	6	21	28.5714
41	9	8	17	47.0588
42	16	4	20	20.0000
43	14	6	20	30.0000
44	15	4	19	21.0526
45	11	7	18	38.8889
46	13	7	20	35.0000
47	16	5	21	23.8095
48	12	7	19	36.8421
49	19	4	23	17.3913
50	14	7	21	33.3333
51	11	7	18	38.8889
52	14	6	20	30.0000
53	14	6	20	30.0000
54	12	6	18	33.3333
55	14	6	20	30.0000
56	15	5	20	25.0000
57	11	10	21	47.6190
58	15	8	23	34.7826
59	11	8	19	42.1053
60	11	9	20	45.0000

MUX LINK SIMULATOR RUN 1838 PAGE 3 OF 4. 14:42 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	14	7	21	33.3333
62	15	6	21	28.5714
63	11	6	17	35.2941
64	13	9	22	40.9091
65	15	6	21	28.5714
66	14	8	22	36.3636
67	15	6	21	28.5714
68	11	8	19	42.1053
69	15	7	22	31.8182
70	16	6	22	27.2727
71	11	8	19	42.1053
72	11	7	18	38.8889
73	11	10	21	47.6190
74	16	3	19	15.7895
75	15	4	19	21.0526
76	13	7	20	35.0000
77	11	11	22	50.0000
78	13	9	22	40.9091
79	15	4	19	21.0526
80	16	5	21	23.8095
81	14	8	22	36.3636
82	13	7	20	35.0000
83	14	8	22	36.3636
84	11	8	19	42.1053
85	13	8	21	38.0952
86	14	5	19	26.3158
87	15	7	22	31.8182
88	13	7	20	35.0000
89	14	6	20	30.0000
90	11	6	17	35.2941

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	13	9	22	40.9091
92	17	5	22	22.7273
93	14	6	20	30.0000
94	13	6	19	31.5789
95	14	6	20	30.0000
96	12	8	20	40.0000
97	16	5	21	23.8095
98	12	7	19	36.8421
99	15	4	19	21.0526
100	15	5	20	25.0000
101	14	4	18	22.2222
102	13	9	22	40.9091
103	14	8	22	36.3636
104	15	6	21	28.5714
105	14	8	22	36.3636
106	12	7	19	36.8421
107	18	4	22	18.1818
108	13	6	19	31.5789
109	8	10	18	55.5556
110	15	6	21	28.5714
111	17	2	19	10.5263
112	14	5	19	26.3158
113	11	5	16	31.2500
114	14	7	21	33.3333
115	12	8	20	40.0000
116	14	8	22	36.3636
117	15	4	19	21.0526
118	14	6	20	30.0000
119	15	7	22	31.8182
120	13	7	20	35.0000
TOTAL	1661	766	2427	31.5616

MUX LINK SIMULATOR RUN 1841 PAGE 1 OF 1. 14:55 6-SEP-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.900  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	205	205	100.0000
2	0	213	213	100.0000
3	0	216	216	100.0000
4	0	209	209	100.0000
5	0	220	220	100.0000
-----				
TOTAL	0	1063	1063	100.0000

MUX LINK SIMULATOR RUN 1861 PAGE 1 OF 1. 14:59 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	182	29	211	13.7441
2	187	32	219	14.6119
3	186	29	215	13.4884
4	175	27	202	13.3663
5	189	30	219	13.6986
	-----	-----	-----	-----
TOTAL	919	147	1066	13.7899



MUX LINK SIMULATOR RUN 1862 PAGE 1 OF 1. 15:01 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	99	109	208	52.4038
2	102	112	214	52.3364
3	103	107	210	50.9524
4	101	101	202	50.0000
5	101	113	214	52.8037
6	106	103	209	49.2823
7	112	98	210	46.6667
8	85	120	205	58.5366
9	102	107	209	51.1962
10	95	116	211	54.9763
	-----	-----	-----	-----
TOTAL	1006	1086	2092	51.9120

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MUX LINK SIMULATOR RUN 1872 PAGE 1 OF 1. 15:04 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	94	116	210	55.2381
2	99	107	206	51.9417
3	107	105	212	49.5283
4	85	124	209	59.3301
5	107	88	195	45.1282
6	103	109	212	51.4151
7	93	116	209	55.5024
8	102	108	210	51.4286
9	95	105	200	52.5000
10	98	101	199	50.7538
	-----	-----	-----	-----
TOTAL	983	1079	2062	52.3278

MUX LINK SIMULATOR RUN 1882 PAGE 1 OF 1. 15:07 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	166	51	217	23.5023
2	170	47	217	21.6590
3	167	45	212	21.2264
4	168	47	215	21.8605
5	170	47	217	21.6590
6	164	45	209	21.5311
7	163	43	206	20.8738
8	168	42	210	20.0000
9	166	48	214	22.4299
10	165	47	212	22.1698
TOTAL	1667	462	2129	21.7003

MUX LINK SIMULATOR RUN 1884 PAGE 1 OF 1. 15:10 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	89	131	220	59.5455
2	87	120	207	57.9710
3	93	116	209	55.5024
4	79	127	206	61.6505
5	93	112	205	54.6341
6	80	131	211	62.0853
7	92	118	210	56.1905
8	79	126	205	61.4634
9	95	107	202	52.9703
10	74	140	214	65.4206
11	93	114	207	55.0725
12	78	130	208	62.5000
13	91	120	211	56.8720
14	81	130	211	61.6114
15	81	129	210	61.4286
16	91	111	202	54.9505
17	75	140	215	65.1163
18	97	109	206	52.9126
19	86	124	210	59.0476
20	83	122	205	59.5122
TOTAL	1717	2457	4174	58.8644

MUX LINK SIMULATOR RUN 1894 PAGE 1 OF 1. 15:14 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.900  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	83	122	205	59.5122
2	83	137	220	62.2727
3	75	130	205	63.4146
4	81	129	210	61.4286
5	79	128	207	61.8357
6	82	125	207	60.3865
7	81	127	208	61.0577
8	76	129	205	62.9268
9	85	119	204	58.3333
10	77	145	222	65.3153
11	95	121	216	56.0185
12	64	148	212	69.8113
13	94	106	200	53.0000
14	74	134	208	64.4231
15	79	124	203	61.0837
16	73	128	201	63.6816
17	86	119	205	58.0488
18	72	124	196	63.2653
19	76	125	201	62.1891
20	81	128	209	61.2440
TOTAL	1596	2548	4144	61.4865

MUX LINK SIMULATOR RUN 1901 PAGE 1 OF 1. 18:42 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	0	0	0.0000
2	0	0	0	0.0000
3	0	0	0	0.0000
4	1	1	2	50.0000
5	1	1	2	50.0000
TOTAL	2	2	4	50.0000

MUX LINK SIMULATOR RUN 1902 PAGE 1 OF 1. 18:45 6-SEP-78  
 ,INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	1	0	1	0.0000
2	1	0	1	0.0000
3	1	0	1	0.0000
4	1	0	1	0.0000
5	1	0	1	0.0000
6	1	0	1	0.0000
7	3	0	3	0.0000
8	0	0	0	0.0000
9	1	0	1	0.0000
10	0	0	0	0.0000
TOTAL	10	0	10	0.0000

MUX LINK SIMULATOR RUN 1912 PAGE 1 OF 1. 18:48 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	0	0	0.0000
2	1	0	1	0.0000
3	2	0	2	0.0000
4	1	0	1	0.0000
5	1	1	2	50.0000
6	2	0	2	0.0000
7	1	0	1	0.0000
8	2	0	2	0.0000
9	2	1	3	33.3333
10	2	0	2	0.0000
TOTAL	14	2	16	12.5000



RUN DATA:

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	0	2	0.0000
2	1	1	2	50.0000
3	2	0	2	0.0000
4	4	0	4	0.0000
5	1	0	1	0.0000
6	2	0	2	0.0000
7	1	0	1	0.0000
8	1	1	2	50.0000
9	1	0	1	0.0000
10	0	0	0	0.0000
11	0	1	1	100.0000
12	1	0	1	0.0000
13	0	0	0	0.0000
14	2	0	2	0.0000
15	1	0	1	0.0000
16	3	1	4	25.0000
17	1	0	1	0.0000
18	1	0	1	0.0000
19	1	0	1	0.0000
20	1	0	1	0.0000
21	2	1	3	33.3333
22	1	0	1	0.0000
23	0	1	1	100.0000
24	0	0	0	0.0000
25	1	0	1	0.0000
26	2	0	2	0.0000
27	1	0	1	0.0000
28	2	0	2	0.0000
29	0	0	0	0.0000
30	1	1	2	50.0000
-----				
TOTAL	36	7	43	16.2791

MUX LINK SIMULATOR RUN 1928 PAGE 1 OF 4. 18:55 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	3	0	3	0.0000
2	2	0	2	0.0000
3	2	1	3	33.3333
4	3	1	4	25.0000
5	1	1	2	50.0000
6	0	0	0	0.0000
7	1	0	1	0.0000
8	0	1	1	100.0000
9	5	0	5	0.0000
10	2	0	2	0.0000
11	3	0	3	0.0000
12	3	0	3	0.0000
13	2	0	2	0.0000
14	1	0	1	0.0000
15	2	0	2	0.0000
16	4	0	4	0.0000
17	2	1	3	33.3333
18	4	0	4	0.0000
19	2	0	2	0.0000
20	1	0	1	0.0000
21	1	0	1	0.0000
22	2	0	2	0.0000
23	2	0	2	0.0000
24	4	0	4	0.0000
25	1	0	1	0.0000
26	0	0	0	0.0000
27	3	0	3	0.0000
28	0	0	0	0.0000
29	0	0	0	0.0000
30	2	1	3	33.3333

MUX LINK SIMULATOR RUN 1928 PAGE 2 OF 4. 18:55 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	2	0	2	0.0000
32	1	0	1	0.0000
33	3	0	3	0.0000
34	1	0	1	0.0000
35	4	0	4	0.0000
36	0	0	0	0.0000
37	5	0	5	0.0000
38	3	0	3	0.0000
39	3	1	4	25.0000
40	2	0	2	0.0000
41	1	0	1	0.0000
42	2	0	2	0.0000
43	4	0	4	0.0000
44	1	0	1	0.0000
45	4	0	4	0.0000
46	5	0	5	0.0000
47	2	0	2	0.0000
48	3	0	3	0.0000
49	2	0	2	0.0000
50	0	0	0	0.0000
51	0	1	1	100.0000
52	1	0	1	0.0000
53	4	0	4	0.0000
54	2	0	2	0.0000
55	3	0	3	0.0000
56	2	0	2	0.0000
57	1	0	1	0.0000
58	1	0	1	0.0000
59	1	0	1	0.0000
60	3	0	3	0.0000

MUX LINK SIMULATOR RUN 1928 PAGE 3 OF 4. 18:55 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
61	4 0 4	0.0000
62	3 1 4	25.0000
63	3 0 3	0.0000
64	4 0 4	0.0000
65	4 0 4	0.0000
66	2 0 2	0.0000
67	1 1 2	50.0000
68	3 0 3	0.0000
69	2 0 2	0.0000
70	2 0 2	0.0000
71	2 0 2	0.0000
72	1 1 2	50.0000
73	2 0 2	0.0000
74	1 1 2	50.0000
75	1 0 1	0.0000
76	1 0 1	0.0000
77	2 0 2	0.0000
78	2 0 2	0.0000
79	4 0 4	0.0000
80	6 0 6	0.0000
81	1 0 1	0.0000
82	2 0 2	0.0000
83	3 0 3	0.0000
84	4 0 4	0.0000
85	2 1 3	33.3333
86	1 0 1	0.0000
87	3 0 3	0.0000
88	2 0 2	0.0000
89	2 0 2	0.0000
90	0 0 0	0.0000

MUX LINK SIMULATOR RUN 1928 PAGE 4 OF 4. 18:55 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	0	0	0	0.0000
92	3	0	3	0.0000
93	1	0	1	0.0000
94	4	0	4	0.0000
95	3	0	3	0.0000
96	2	0	2	0.0000
97	2	0	2	0.0000
98	1	0	1	0.0000
99	3	0	3	0.0000
100	2	0	2	0.0000
101	1	0	1	0.0000
102	0	0	0	0.0000
103	2	0	2	0.0000
104	5	0	5	0.0000
105	1	0	1	0.0000
106	2	0	2	0.0000
107	4	0	4	0.0000
108	3	0	3	0.0000
109	1	0	1	0.0000
110	2	0	2	0.0000
111	2	0	2	0.0000
112	3	0	3	0.0000
113	3	0	3	0.0000
114	2	0	2	0.0000
115	0	0	0	0.0000
116	1	0	1	0.0000
117	1	1	2	50.0000
118	2	0	2	0.0000
119	5	0	5	0.0000
120	2	0	2	0.0000
TOTAL	257	14	271	5.1661

MUX LINK SIMULATOR RUN 1938 PAGE 1 OF 4. 19:09 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	0	2	0.0000
2	2	1	3	33.3333
3	4	0	4	0.0000
4	3	0	3	0.0000
5	3	1	4	25.0000
6	3	0	3	0.0000
7	4	0	4	0.0000
8	3	0	3	0.0000
9	2	0	2	0.0000
10	1	0	1	0.0000
11	1	0	1	0.0000
12	2	0	2	0.0000
13	1	0	1	0.0000
14	0	0	0	0.0000
15	0	0	0	0.0000
16	2	1	3	33.3333
17	1	0	1	0.0000
18	3	0	3	0.0000
19	3	0	3	0.0000
20	2	0	2	0.0000
21	3	0	3	0.0000
22	3	0	3	0.0000
23	5	0	5	0.0000
24	6	0	6	0.0000
25	2	0	2	0.0000
26	2	0	2	0.0000
27	4	0	4	0.0000
28	4	0	4	0.0000
29	4	0	4	0.0000
30	2	0	2	0.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRPB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	1	0	1	0.0000
32	4	0	4	0.0000
33	3	1	4	25.0000
34	2	0	2	0.0000
35	6	0	6	0.0000
36	4	0	4	0.0000
37	2	0	2	0.0000
38	3	0	3	0.0000
39	0	1	1	100.0000
40	2	1	3	33.3333
41	5	0	5	0.0000
42	4	1	5	20.0000
43	1	0	1	0.0000
44	2	0	2	0.0000
45	1	0	1	0.0000
46	0	0	0	0.0000
47	2	0	2	0.0000
48	3	0	3	0.0000
49	2	0	2	0.0000
50	4	0	4	0.0000
51	1	0	1	0.0000
52	4	0	4	0.0000
53	2	0	2	0.0000
54	1	0	1	0.0000
55	3	0	3	0.0000
56	3	0	3	0.0000
57	3	0	3	0.0000
58	3	0	3	0.0000
59	1	1	2	50.0000
60	4	0	4	0.0000

MUX LINK SIMULATOR RUN 1938 PAGE 3 OF 4. 19:09 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	4	0	4	0.0000
62	3	0	3	0.0000
63	3	0	3	0.0000
64	1	0	1	0.0000
65	2	0	2	0.0000
66	2	0	2	0.0000
67	4	0	4	0.0000
68	3	1	4	25.0000
69	2	0	2	0.0000
70	1	0	1	0.0000
71	2	0	2	0.0000
72	6	0	6	0.0000
73	3	0	3	0.0000
74	2	0	2	0.0000
75	3	0	3	0.0000
76	2	0	2	0.0000
77	1	0	1	0.0000
78	5	0	5	0.0000
79	1	0	1	0.0000
80	3	0	3	0.0000
81	4	0	4	0.0000
82	3	0	3	0.0000
83	2	0	2	0.0000
84	3	1	4	25.0000
85	4	0	4	0.0000
86	0	0	0	0.0000
87	1	0	1	0.0000
88	4	0	4	0.0000
89	4	0	4	0.0000
90	5	0	5	0.0000



RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	0	0	0	0.0000
92	1	0	1	0.0000
93	2	0	2	0.0000
94	3	0	3	0.0000
95	5	0	5	0.0000
96	3	0	3	0.0000
97	3	0	3	0.0000
98	0	0	0	0.0000
99	3	1	4	25.0000
100	0	0	0	0.0000
101	2	1	3	33.3333
102	0	1	1	100.0000
103	2	0	2	0.0000
104	2	0	2	0.0000
105	1	0	1	0.0000
106	1	1	2	50.0000
107	2	0	2	0.0000
108	0	0	0	0.0000
109	5	0	5	0.0000
110	4	0	4	0.0000
111	3	0	3	0.0000
112	3	0	3	0.0000
113	3	0	3	0.0000
114	2	1	3	33.3333
115	1	0	1	0.0000
116	1	0	1	0.0000
117	4	0	4	0.0000
118	1	0	1	0.0000
119	2	0	2	0.0000
120	2	0	2	0.0000
-----				
TOTAL	297	15	312	4.8077

MUX LINK SIMULATOR RUN 1941 PAGE 1 OF 1. 19:23 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	0	8	8	100.0000
2	0	10	10	100.0000
3	0	6	6	100.0000
4	0	6	6	100.0000
5	0	8	8	100.0000
-----				
TOTAL	0	38	38	100.0000

MUX LINK SIMULATOR RUN 1961 PAGE 1 OF 1. 19:26 6-SEP-78  
INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PRPB. OF TGT.: 0.100  
LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	22	0	22	0.0000
2	15	0	15	0.0000
3	23	0	23	0.0000
4	24	1	25	4.0000
5	17	0	17	0.0000
-----				
TOTAL	101	1	102	0.9804

MUX LINK SIMULATOR RUN 1962 PAGE 1 OF 1. 19:29 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	24	0	24	0.0000
2	18	0	18	0.0000
3	19	0	19	0.0000
4	24	0	24	0.0000
5	20	0	20	0.0000
6	25	0	25	0.0000
7	17	0	17	0.0000
8	23	0	23	0.0000
9	23	0	23	0.0000
10	23	0	23	0.0000
TOTAL	216	0	216	0.0000

MUX LINK SIMULATOR RUN 1972 PAGE 1 OF 1. 19:32 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	24	2	26	7.6923
2	15	2	17	11.7647
3	21	2	23	8.6957
4	19	2	21	9.5238
5	20	4	24	16.6667
6	22	0	22	0.0000
7	22	2	24	8.3333
8	16	1	17	5.8824
9	23	3	26	11.5385
10	16	1	17	5.8824
TOTAL	198	19	217	8.7558

MUX LINK SIMULATOR RUN 1982 PAGE 1 OF 1. 19:35 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	0	20	0.0000
2	17	2	19	10.5263
3	18	2	20	10.0000
4	17	3	20	15.0000
5	21	0	21	0.0000
6	17	2	19	10.5263
7	26	1	27	3.7037
8	31	1	32	3.1250
9	20	0	20	0.0000
10	26	0	26	0.0000
TOTAL	213	11	224	4.9107

MUX LINK SIMULATOR RUN 1984 PAGE 1 OF 1. 19:38 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	7	19	26	73.0769
2	5	7	12	58.3333
3	4	11	15	73.3333
4	3	7	10	70.0000
5	7	9	16	56.2500
6	4	9	13	69.2308
7	3	14	17	82.3529
8	5	12	17	70.5882
9	2	10	12	83.3333
10	4	9	13	69.2308
11	6	14	20	70.0000
12	5	9	14	64.2857
13	3	8	11	72.7273
14	5	11	16	68.7500
15	2	6	8	75.0000
16	6	13	19	68.4211
17	6	10	16	62.5000
18	3	6	9	66.6667
19	5	12	17	70.5882
20	2	10	12	83.3333
-----				
TOTAL	87	206	293	70.3072

MUX LINK SIMULATOR RUN 1994 PAGE 1 OF 1. 19:42 6-SEP-78  
 INT. SENSORS, LINEAR POLLING, SIMULTANEOUS TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	4	14	18	77.7778
2	4	7	11	63.6364
3	3	11	14	78.5714
4	0	8	8	100.0000
5	5	10	15	66.6667
6	5	10	15	66.6667
7	5	3	8	37.5000
8	4	8	12	66.6667
9	2	11	13	84.6154
10	4	6	10	60.0000
11	2	7	9	77.7778
12	5	5	10	50.0000
13	3	5	8	62.5000
14	4	8	12	66.6667
15	5	9	14	64.2857
16	3	8	11	72.7273
17	4	8	12	66.6667
18	7	8	15	53.3333
19	2	12	14	85.7143
20	7	9	16	56.2500
TOTAL	78	167	245	68.1633



MUX LINK SIMULATOR RUN 2101 PAGE 1 OF 1. 15:17 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	3	2	5	40.0000
2	1	1	2	50.0000
3	3	3	6	50.0000
4	3	2	5	40.0000
5	0	0	0	0.0000
-----				
TOTAL	10	8	18	44.4444

MUX LINK SIMULATOR RUN 2102 PAGE 1 OF 1. 15:20 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA: /

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	3 3 6	50.0000
2	2 2 4	50.0000
3	1 1 2	50.0000
4	1 0 1	0.0000
5	4 2 6	33.3333
6	0 0 0	0.0000
7	3 3 6	50.0000
8	2 3 5	60.0000
9	2 2 4	50.0000
10	2 2 4	50.0000
TOTAL	----- 20 18 38	----- 47.3684

MUX LINK SIMULATOR RUN .2112 PAGE 1 OF 1. 15:24 21-DEC-78  
INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
SENSOR PERIOD: 300. SEC  
SENSOR BUFFER: 5240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PRPB. OF TGT.: 0.100  
LENGTH OF RUN: 2.00 HRS  
# REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	3	3	6	50.0000
2	3	3	6	50.0000
3	2	3	5	60.0000
4	2	2	4	50.0000
5	1	1	2	50.0000
6	2	2	4	50.0000
7	4	3	7	42.8571
8	2	2	4	50.0000
9	0	0	0	0.0000
10	1	1	2	50.0000
TOTAL	20	20	40	50.0000

MUX LINK SIMULATOR RUN 2125 PAGE 1 OF 1. 20:59 2-JAN-79  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	2	2	4	50.0000
2	3	3	6	50.0000
3	0	0	0	0.0000
4	7	4	11	36.3636
5	2	2	4	50.0000
6	0	0	0	0.0000
7	1	0	1	0.0000
8	2	2	4	50.0000
9	5	3	8	37.5000
10	2	1	3	33.3333
11	2	2	4	50.0000
12	2	2	4	50.0000
13	1	1	2	50.0000
14	0	0	0	0.0000
15	4	4	8	50.0000
16	0	0	0	0.0000
17	2	1	3	33.3333
18	2	2	4	50.0000
19	1	2	3	66.6667
20	1	1	2	50.0000
21	2	2	4	50.0000
22	2	2	4	50.0000
23	2	2	4	50.0000
24	3	2	5	40.0000
25	0	0	0	0.0000
26	1	1	2	50.0000
27	6	5	11	45.4545
28	0	0	0	0.0000
29	3	2	5	40.0000
30	2	2	4	50.0000
TOTAL	60	50	110	45.4545

MUX LINK SIMULATOR RUN 2128 PAGE 1 OF 4. 15:33 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	0	0	0	0.0000
2	2	1	3	33.3333
3	2	2	4	50.0000
4	0	0	0	0.0000
5	2	2	4	50.0000
6	4	3	7	42.8571
7	3	3	6	50.0000
8	1	1	2	50.0000
9	1	1	2	50.0000
10	4	3	7	42.8571
11	3	3	6	50.0000
12	1	1	2	50.0000
13	2	2	4	50.0000
14	4	4	8	50.0000
15	3	1	4	25.0000
16	3	3	6	50.0000
17	5	3	8	37.5000
18	4	2	6	33.3333
19	1	1	2	50.0000
20	0	0	0	0.0000
21	1	1	2	50.0000
22	0	0	0	0.0000
23	2	2	4	50.0000
24	2	2	4	50.0000
25	1	1	2	50.0000
26	3	3	6	50.0000
27	3	3	6	50.0000
28	4	4	8	50.0000
29	2	1	3	33.3333
30	1	1	2	50.0000

MUX LINK SIMULATOR RUN 2128 PAGE 2 OF 4. 15:33 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	2	2	4	50.0000
32	0	0	0	0.0000
33	2	1	3	33.3333
34	0	0	0	0.0000
35	3	3	6	50.0000
36	2	2	4	50.0000
37	3	3	6	50.0000
38	1	1	2	50.0000
39	7	5	12	41.6667
40	4	4	8	50.0000
41	3	3	6	50.0000
42	2	2	4	50.0000
43	0	1	1	100.0000
44	3	3	6	50.0000
45	1	1	2	50.0000
46	0	0	0	0.0000
47	2	2	4	50.0000
48	1	1	2	50.0000
49	2	1	3	33.3333
50	3	3	6	50.0000
51	0	0	0	0.0000
52	2	2	4	50.0000
53	3	2	5	40.0000
54	5	4	9	44.4444
55	2	2	4	50.0000
56	2	2	4	50.0000
57	0	0	0	0.0000
58	1	1	2	50.0000
59	1	1	2	50.0000
60	3	2	5	40.0000

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	2	2	4	50.0000
62	6	4	10	40.0000
63	2	1	3	33.3333
64	1	1	2	50.0000
65	2	1	3	33.3333
66	1	1	2	50.0000
67	1	1	2	50.0000
68	3	3	6	50.0000
69	1	2	3	66.6667
70	3	3	6	50.0000
71	3	3	6	50.0000
72	7	6	13	46.1538
73	1	1	2	50.0000
74	4	3	7	42.8571
75	0	0	0	0.0000
76	3	3	6	50.0000
77	1	1	2	50.0000
78	3	3	6	50.0000
79	0	0	0	0.0000
80	1	1	2	50.0000
81	3	2	5	40.0000
82	2	2	4	50.0000
83	3	3	6	50.0000
84	2	1	3	33.3333
85	0	0	0	0.0000
86	1	1	2	50.0000
87	4	2	6	33.3333
88	1	1	2	50.0000
89	2	2	4	50.0000
90	2	1	3	33.3333

MUX LINK SIMULATOR RUN 2128 PAGE 4 OF 4. 15:33 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	4	3	7	42.8571
92	3	3	6	50.0000
93	2	2	4	50.0000
94	3	3	6	50.0000
95	1	1	2	50.0000
96	1	1	2	50.0000
97	1	1	2	50.0000
98	2	2	4	50.0000
99	1	1	2	50.0000
100	5	4	9	44.4444
101	2	2	4	50.0000
102	2	2	4	50.0000
103	0	1	1	100.0000
104	1	1	2	50.0000
105	5	3	8	37.5000
106	2	2	4	50.0000
107	1	1	2	50.0000
108	3	2	5	40.0000
109	3	3	6	50.0000
110	2	1	3	33.3333
111	2	2	4	50.0000
112	2	2	4	50.0000
113	3	2	5	40.0000
114	2	2	4	50.0000
115	1	1	2	50.0000
116	2	2	4	50.0000
117	1	2	3	66.6667
118	2	1	3	33.3333
119	3	2	5	40.0000
120	1	1	2	50.0000
TOTAL	252	219	471	46.4968



MUX LINK SIMULATOR RUN 2138 PAGE 1 OF 4. 15:48 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	1	1	2	50.0000
2	2	2	4	50.0000
3	2	3	5	60.0000
4	2	2	4	50.0000
5	3	3	6	50.0000
6	0	0	0	0.0000
7	3	3	6	50.0000
8	0	0	0	0.0000
9	1	2	3	66.6667
10	6	5	11	45.4545
11	7	4	11	36.3636
12	0	0	0	0.0000
13	4	3	7	42.8571
14	2	2	4	50.0000
15	4	4	8	50.0000
16	2	2	4	50.0000
17	6	5	11	45.4545
18	2	2	4	50.0000
19	3	3	6	50.0000
20	1	1	2	50.0000
21	0	0	0	0.0000
22	4	3	7	42.8571
23	3	3	6	50.0000
24	1	1	2	50.0000
25	3	3	6	50.0000
26	2	2	4	50.0000
27	3	3	6	50.0000
28	4	4	8	50.0000
29	5	5	10	50.0000
30	3	3	6	50.0000

MUX LINK SIMULATOR RUN 2138 PAGE 2 OF 4. 15:48 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	3	2	5	40.0000
32	3	3	6	50.0000
33	4	5	9	55.5556
34	2	2	4	50.0000
35	2	2	4	50.0000
36	2	2	4	50.0000
37	2	3	5	60.0000
38	2	1	3	33.3333
39	1	1	2	50.0000
40	2	2	4	50.0000
41	3	2	5	40.0000
42	1	1	2	50.0000
43	1	1	2	50.0000
44	4	4	8	50.0000
45	1	1	2	50.0000
46	2	2	4	50.0000
47	1	0	1	0.0000
48	1	1	2	50.0000
49	3	3	6	50.0000
50	3	2	5	40.0000
51	2	2	4	50.0000
52	2	2	4	50.0000
53	0	0	0	0.0000
54	1	1	2	50.0000
55	2	2	4	50.0000
56	1	1	2	50.0000
57	2	2	4	50.0000
58	3	3	6	50.0000
59	1	1	2	50.0000
60	4	3	7	42.8571

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	1	1	2	50.0000
62	3	3	6	50.0000
63	1	1	2	50.0000
64	1	1	2	50.0000
65	1	2	3	66.6667
66	1	1	2	50.0000
67	1	1	2	50.0000
68	1	1	2	50.0000
69	1	2	3	66.6667
70	0	0	0	0.0000
71	1	2	3	66.6667
72	2	1	3	33.3333
73	2	2	4	50.0000
74	5	5	10	50.0000
75	1	1	2	50.0000
76	5	4	9	44.4444
77	3	3	6	50.0000
78	2	3	5	60.0000
79	3	3	6	50.0000
80	4	3	7	42.8571
81	0	0	0	0.0000
82	1	1	2	50.0000
83	3	2	5	40.0000
84	0	0	0	0.0000
85	2	2	4	50.0000
86	3	3	6	50.0000
87	3	3	6	50.0000
88	4	4	8	50.0000
89	1	1	2	50.0000
90	1	1	2	50.0000

MUX LINK SIMULATOR RUN 2138 PAGE 4 OF 4. 15:48 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	3	3	6	50.0000
92	1	1	2	50.0000
93	0	0	0	0.0000
94	3	1	4	25.0000
95	0	0	0	0.0000
96	2	3	5	60.0000
97	2	2	4	50.0000
98	1	1	2	50.0000
99	4	3	7	42.8571
100	3	3	6	50.0000
101	3	3	6	50.0000
102	2	3	5	60.0000
103	2	2	4	50.0000
104	3	3	6	50.0000
105	3	2	5	40.0000
106	1	1	2	50.0000
107	1	1	2	50.0000
108	2	2	4	50.0000
109	0	0	0	0.0000
110	2	2	4	50.0000
111	2	2	4	50.0000
112	5	3	8	37.5000
113	4	3	7	42.8571
114	3	3	6	50.0000
115	0	0	0	0.0000
116	6	4	10	40.0000
117	2	2	4	50.0000
118	3	2	5	40.0000
119	1	1	2	50.0000
120	3	3	6	50.0000
TOTAL	264	247	511	48.3366

MUX LINK SIMULATOR RUN 2141 PAGE 1 OF 1. 16:03 21-DEC-78  
INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 300 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.100  
LENGTH OF RUN: 2.00 HRS  
# REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	0 27 27	100.0000
2	0 17 17	100.0000
3	0 25 25	100.0000
4	0 28 28	100.0000
5	0 25 25	100.0000
-----		
TOTAL	0 122 122	100.0000

MUX LINK SIMULATOR RUN 2161 PAGE 1 OF 1. 16:06 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	29	27	56	48.2143
2	21	22	43	51.1628
3	20	20	40	50.0000
4	26	24	50	48.0000
5	24	17	41	41.4634
-----				
TOTAL	120	110	230	47.8261

MUX LINK SIMULATOR RUN 2162 PAGE 1 OF 1. 16:09 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	25	24	49	48.9796
2	20	22	42	52.3810
3	20	23	43	53.4884
4	16	15	31	48.3871
5	33	31	64	48.4375
6	18	16	34	47.0588
7	22	25	47	53.1915
8	15	18	33	54.5455
9	20	20	40	50.0000
10	23	25	48	52.0833
TOTAL	212	219	431	50.8121

MUX LINK SIMULATOR RUN 2172 PAGE 1 OF 1. 16:14 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	12	14	26	53.8462
2	12	16	28	57.1429
3	27	28	55	50.9091
4	22	20	42	47.6190
5	11	15	26	57.6923
6	23	23	46	50.0000
7	18	15	33	45.4545
8	19	17	36	47.2222
9	21	21	42	50.0000
10	23	20	43	46.5116
TOTAL	188	189	377	50.1326



MUX LINK SIMULATOR RUN 2182 PAGE 1 OF 1. 16:18 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	19	18	37	48.6486
2	17	17	34	50.0000
3	21	20	41	48.7805
4	27	23	50	46.0000
5	13	14	27	51.8519
6	26	24	50	48.0000
7	24	24	48	50.0000
8	20	17	37	45.9459
9	24	20	44	45.4545
10	22	20	42	47.6190
-----				
TOTAL	213	197	410	48.0488

MUX LINK SIMULATOR RUN 2184 PAGE 1 OF 1. 16:21 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	20 20 40	50.0000
2	16 17 33	51.5152
3	18 20 38	52.6316
4	18 22 40	55.0000
5	21 25 46	54.3478
6	25 26 51	50.9804
7	13 20 33	60.6061
8	21 23 44	52.2727
9	22 21 43	48.8372
10	25 28 53	52.8302
11	31 33 64	51.5625
12	32 28 60	46.6667
13	16 20 36	55.5556
14	23 24 47	51.0638
15	17 17 34	50.0000
16	16 21 37	56.7568
17	17 18 35	51.4286
18	16 20 36	55.5556
19	24 25 49	51.0204
20	22 29 51	56.8627
TOTAL	----- 413 457 870	----- 52.5287

MUX LINK SIMULATOR RUN 2194 PAGE 1 OF 1. 16:26 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 5

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	24	21	45	46.6667
2	23	24	47	51.0638
3	20	20	40	50.0000
4	20	21	41	51.2195
5	19	20	39	51.2821
6	19	17	36	47.2222
7	25	25	50	50.0000
8	20	23	43	53.4884
9	23	22	45	48.8889
10	26	26	52	50.0000
11	23	25	48	52.0833
12	19	19	38	50.0000
13	21	19	40	47.5000
14	27	29	56	51.7857
15	19	19	38	50.0000
16	18	18	36	50.0000
17	20	23	43	53.4884
18	21	22	43	51.1628
19	25	24	49	48.9796
20	21	18	39	46.1538
TOTAL	433	435	868	50.1152

MUX LINK SIMULATOR RUN 2201 PAGE 1 OF 1. 13:59 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	4	3	7	42.8571
2	3	3	6	50.0000
3	2	1	3	33.3333
4	1	1	2	50.0000
5	0	0	0	0.0000
TOTAL	10	8	18	44.4444

MUX LINK SIMULATOR RUN 2202 PAGE 1 OF 1. 14:04 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	1	1	2	50.0000
2	4	1	5	20.0000
3	1	2	3	66.6667
4	2	2	4	50.0000
5	5	4	9	44.4444
6	4	3	7	42.8571
7	2	2	4	50.0000
8	0	0	0	0.0000
9	2	2	4	50.0000
10	3	3	6	50.0000
TOTAL	24	20	44	45.4545

MUX LINK SIMULATOR RUN 2212 PAGE 1 OF 1. 14:08 22-DEC-78  
 .INT. SENSORS, ANSWER SLOTS,EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 1240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	3	3	6	50.0000
2	1	1	2	50.0000
3	2	2	4	50.0000
4	3	3	6	50.0000
5	4	3	7	42.8571
6	1	1	2	50.0000
7	3	2	5	40.0000
8	1	2	3	66.6667
9	2	3	5	60.0000
10	6	3	9	33.3333
TOTAL	26	23	49	46.9388

MUX LINK SIMULATOR RUN 2225 PAGE 1 OF 1. 16:23 4-JAN-79  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA

NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	3	3	6	50.0000
2	3	3	6	50.0000
3	4	4	8	50.0000
4	3	2	5	40.0000
5	1	1	2	50.0000
6	1	1	2	50.0000
7	0	0	0	0.0000
8	2	2	4	50.0000
9	0	0	0	0.0000
10	2	2	4	50.0000
11	6	4	10	40.0000
12	3	3	6	50.0000
13	1	1	2	50.0000
14	1	1	2	50.0000
15	2	1	3	33.3333
16	5	5	10	50.0000
17	0	0	0	0.0000
18	3	1	4	25.0000
19	1	0	1	0.0000
20	0	0	0	0.0000
21	3	3	6	50.0000
22	3	3	6	50.0000
23	5	3	8	37.5000
24	3	1	4	25.0000
25	2	2	4	50.0000
26	1	1	2	50.0000
27	6	4	10	40.0000
28	1	1	2	50.0000
29	4	4	8	50.0000
30	3	3	6	50.0000
TOTAL	72	59	131	45.0382

MUX LINK SIMULATOR RUN 2228 PAGE 1 OF 4. 14:17 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	3	1	4	25.0000
2	1	1	2	50.0000
3	2	2	4	50.0000
4	2	2	4	50.0000
5	4	3	7	42.8571
6	2	2	4	50.0000
7	2	2	4	50.0000
8	3	1	4	25.0000
9	2	2	4	50.0000
10	3	3	6	50.0000
11	1	1	2	50.0000
12	1	1	2	50.0000
13	1	1	2	50.0000
14	4	3	7	42.8571
15	0	0	0	0.0000
16	4	4	8	50.0000
17	1	1	2	50.0000
18	1	1	2	50.0000
19	3	3	6	50.0000
20	1	1	2	50.0000
21	2	2	4	50.0000
22	2	2	4	50.0000
23	2	2	4	50.0000
24	4	4	8	50.0000
25	1	1	2	50.0000
26	4	3	7	42.8571
27	1	1	2	50.0000
28	2	2	4	50.0000
29	0	0	0	0.0000
30	4	3	7	42.8571



MUX LINK SIMULATOR RUN 2228 PAGE 2 OF 4. 14:17 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	3	3	6	50.0000
32	1	1	2	50.0000
33	1	1	2	50.0000
34	2	2	4	50.0000
35	3	2	5	40.0000
36	2	2	4	50.0000
37	5	5	10	50.0000
38	1	1	2	50.0000
39	2	2	4	50.0000
40	1	1	2	50.0000
41	1	1	2	50.0000
42	0	0	0	0.0000
43	2	2	4	50.0000
44	3	3	6	50.0000
45	3	4	7	57.1429
46	0	0	0	0.0000
47	2	3	5	60.0000
48	5	3	8	37.5000
49	0	1	1	100.0000
50	2	2	4	50.0000
51	2	2	4	50.0000
52	3	3	6	50.0000
53	2	2	4	50.0000
54	5	3	8	37.5000
55	2	2	4	50.0000
56	5	4	9	44.4444
57	3	3	6	50.0000
58	3	2	5	40.0000
59	4	4	8	50.0000
60	2	2	4	50.0000

MUX LINK SIMULATOR RUN 2228 PAGE 3 OF 4. 14:17 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	2	2	4	50.0000
62	2	2	4	50.0000
63	2	2	4	50.0000
64	2	2	4	50.0000
65	2	2	4	50.0000
66	1	1	2	50.0000
67	2	0	2	0.0000
68	0	1	1	100.0000
69	4	3	7	42.8571
70	1	1	2	50.0000
71	3	3	6	50.0000
72	3	2	5	40.0000
73	5	4	9	44.4444
74	1	2	3	66.6667
75	1	1	2	50.0000
76	2	3	5	60.0000
77	1	1	2	50.0000
78	1	1	2	50.0000
79	4	3	7	42.8571
80	4	4	8	50.0000
81	1	2	3	66.6667
82	2	1	3	33.3333
83	2	2	4	50.0000
84	4	3	7	42.8571
85	2	2	4	50.0000
86	2	2	4	50.0000
87	1	1	2	50.0000
88	3	2	5	40.0000
89	3	2	5	40.0000
90	2	1	3	33.3333

MUX LINK SIMULATOR RUN 2228 PAGE 4 OF 4. 14:17 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	3	2	5	40.0000
92	4	2	6	33.3333
93	5	3	8	37.5000
94	0	0	0	0.0000
95	3	1	4	25.0000
96	3	3	6	50.0000
97	1	2	3	66.6667
98	1	1	2	50.0000
99	1	1	2	50.0000
100	7	3	10	30.0000
101	2	2	4	50.0000
102	2	2	4	50.0000
103	3	2	5	40.0000
104	3	3	6	50.0000
105	3	3	6	50.0000
106	3	3	6	50.0000
107	2	2	4	50.0000
108	0	0	0	0.0000
109	0	0	0	0.0000
110	2	2	4	50.0000
111	2	2	4	50.0000
112	2	2	4	50.0000
113	2	2	4	50.0000
114	2	2	4	50.0000
115	1	1	2	50.0000
116	1	1	2	50.0000
117	4	3	7	42.8571
118	3	3	6	50.0000
119	1	1	2	50.0000
120	4	4	8	50.0000
TOTAL	268	237	505	46.9307

MUX LINK SIMULATOR RUN 2238 PAGE 1 OF 4. 14:31 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS.

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	1	1	2	50.0000
2	2	2	4	50.0000
3	1	0	1	0.0000
4	1	1	2	50.0000
5	4	4	8	50.0000
6	4	4	8	50.0000
7	1	1	2	50.0000
8	6	5	11	45.4545
9	1	1	2	50.0000
10	2	2	4	50.0000
11	3	3	6	50.0000
12	1	1	2	50.0000
13	3	2	5	40.0000
14	1	1	2	50.0000
15	1	1	2	50.0000
16	2	2	4	50.0000
17	2	1	3	33.3333
18	5	4	9	44.4444
19	0	0	0	0.0000
20	2	2	4	50.0000
21	5	4	9	44.4444
22	4	3	7	42.8571
23	2	2	4	50.0000
24	3	3	6	50.0000
25	5	3	8	37.5000
26	5	3	8	37.5000
27	3	3	6	50.0000
28	4	4	8	50.0000
29	2	2	4	50.0000
30	3	3	6	50.0000

MUX LINK SIMULATOR RUN 2238 PAGE 2 OF 4: 14:31 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	1	1	2	50.0000
32	2	2	4	50.0000
33	2	2	4	50.0000
34	0	0	0	0.0000
35	2	2	4	50.0000
36	3	3	6	50.0000
37	4	4	8	50.0000
38	2	2	4	50.0000
39	1	1	2	50.0000
40	2	2	4	50.0000
41	2	1	3	33.3333
42	1	1	2	50.0000
43	2	1	3	33.3333
44	3	3	6	50.0000
45	1	1	2	50.0000
46	2	2	4	50.0000
47	2	1	3	33.3333
48	2	2	4	50.0000
49	0	0	0	0.0000
50	4	4	8	50.0000
51	0	0	0	0.0000
52	1	1	2	50.0000
53	3	3	6	50.0000
54	2	2	4	50.0000
55	5	5	10	50.0000
56	0	0	0	0.0000
57	1	1	2	50.0000
58	2	2	4	50.0000
59	3	3	6	50.0000
60	3	2	5	40.0000

MUX LINK SIMULATOR RUN 2238 PAGE 3 OF 4. 14:31 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	0	0	0	0.0000
62	2	2	4	50.0000
63	3	2	5	40.0000
64	4	4	8	50.0000
65	1	1	2	50.0000
66	3	3	6	50.0000
67	4	3	7	42.8571
68	0	0	0	0.0000
69	2	2	4	50.0000
70	1	0	1	0.0000
71	2	2	4	50.0000
72	1	0	1	0.0000
73	4	4	8	50.0000
74	5	4	9	44.4444
75	2	2	4	50.0000
76	1	1	2	50.0000
77	2	2	4	50.0000
78	1	1	2	50.0000
79	1	1	2	50.0000
80	1	1	2	50.0000
81	0	0	0	0.0000
82	5	4	9	44.4444
83	4	4	8	50.0000
84	1	1	2	50.0000
85	1	1	2	50.0000
86	2	2	4	50.0000
87	4	3	7	42.8571
88	2	2	4	50.0000
89	0	0	0	0.0000
90	2	2	4	50.0000

MUX LINK SIMULATOR RUN 2238 PAGE 4 OF 4. 14:31 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	1	1	2	50.0000
92	1	1	2	50.0000
93	4	4	8	50.0000
94	2	1	3	33.3333
95	1	1	2	50.0000
96	3	3	6	50.0000
97	2	2	4	50.0000
98	0	0	0	0.0000
99	2	1	3	33.3333
100	2	1	3	33.3333
101	3	2	5	40.0000
102	8	4	12	33.3333
103	3	3	6	50.0000
104	0	0	0	0.0000
105	1	1	2	50.0000
106	2	2	4	50.0000
107	1	1	2	50.0000
108	5	3	8	37.5000
109	4	4	8	50.0000
110	1	1	2	50.0000
111	3	2	5	40.0000
112	2	1	3	33.3333
113	2	2	4	50.0000
114	4	2	6	33.3333
115	3	3	6	50.0000
116	3	3	6	50.0000
117	2	2	4	50.0000
118	1	1	2	50.0000
119	4	2	6	33.3333
120	3	3	6	50.0000
TOTAL	271	233	504	46.2302

MUX LINK SIMULATOR RUN 2241 PAGE 1 OF 1. 14:46 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	0 22 22	100.0000
2	0 23 23	100.0000
3	0 15 15	100.0000
4	0 20 20	100.0000
5	0 28 28	100.0000
TOTAL	0 108 108	100.0000



MUX LINK SIMULATOR RUN 2261 PAGE 1 OF 1. 14:50 22-DEC-78  
INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PRØB. OF TGT.: 0.100  
LENGTH OF RUN: 2.00 HRS  
# REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	24 22 46	47.8261
2	31 28 59	47.4576
3	20 18 38	47.3684
4	13 12 25	48.0000
5	17 17 34	50.0000
TOTAL	----- 105 97 202	----- 48.0198

MUX LINK SIMULATOR RUN 2262 PAGE 1 OF 1. 14:53 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	20	22	42	52.3810
2	28	27	55	49.0909
3	27	24	51	47.0588
4	12	15	27	55.5556
5	29	30	59	50.8475
6	20	22	42	52.3810
7	20	20	40	50.0000
8	19	17	36	47.2222
9	18	19	37	51.3514
10	21	23	44	52.2727
TOTAL	214	219	433	50.5774

MUX LINK SIMULATOR RUN 2272 PAGE 1 OF 1. 14:57 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	24 21 45	46.6667
2	20 18 38	47.3684
3	19 18 37	48.6486
4	21 22 43	51.1628
5	22 23 45	51.1111
6	20 20 40	50.0000
7	25 24 49	48.9796
8	23 20 43	46.5116
9	21 21 42	50.0000
10	17 18 35	51.4286
TOTAL	----- 212 205 417	----- 49.1607

MUX LINK SIMULATOR RUN 2282 PAGE 1 OF 1. 15:01 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	15	18	33	54.5455
2	21	21	42	50.0000
3	29	30	59	50.8475
4	20	18	38	47.3684
5	28	31	59	52.5424
6	25	24	49	48.9796
7	24	26	50	52.0000
8	25	25	50	50.0000
9	20	19	39	48.7179
10	24	23	47	48.9362
-----				
TOTAL	231	235	466	50.4292

MUX LINK SIMULATOR RUN 2284 PAGE 1 OF 1. 15:05 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	26	23	49	46.9388
2	16	16	32	50.0000
3	20	23	43	53.4884
4	31	31	62	50.0000
5	31	26	57	45.6140
6	19	19	38	50.0000
7	20	22	42	52.3810
8	22	24	46	52.1739
9	23	25	48	52.0833
10	19	19	38	50.0000
11	20	23	43	53.4884
12	21	21	42	50.0000
13	20	22	42	52.3810
14	24	26	50	52.0000
15	23	21	44	47.7273
16	19	20	39	51.2821
17	19	17	36	47.2222
18	17	14	31	45.1613
19	13	12	25	48.0000
20	18	21	39	53.8462
TOTAL	421	425	846	50.2364

MUX LINK SIMULATOR RUN 2294 PAGE 1 OF 1. 15:09 22-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.100  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	24	22	46	47.8261
2	25	25	50	50.0000
3	19	19	38	50.0000
4	23	19	42	45.2381
5	19	19	38	50.0000
6	33	30	63	47.6190
7	27	22	49	44.8980
8	20	19	39	48.7179
9	22	21	43	48.8372
10	19	16	35	45.7143
11	23	23	46	50.0000
12	17	15	32	46.8750
13	21	21	42	50.0000
14	26	23	49	46.9388
15	24	23	47	48.9362
16	25	26	51	50.9804
17	27	29	56	51.7857
18	22	19	41	46.3415
19	24	20	44	45.4545
20	15	19	34	55.8824
TOTAL	455	430	885	48.5876

MUX LINK SIMULATOR RUN 2301 PAGE 1 OF 1. 16:30 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT
	SENT	DROPPED	TOTAL	DROPPED
1	9	8	17	47.0588
2	13	6	19	31.5789
3	8	5	13	38.4615
4	8	4	12	33.3333
5	13	7	20	35.0000
-----				
TOTAL	51	30	81	37.0370

MUX LINK SIMULATOR RUN 2302 PAGE 1 OF 1. 18:38 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	15	7	22	31.8182
2	12	7	19	36.8421
3	8	5	13	38.4615
4	11	7	18	38.8889
5	14	7	21	33.3333
6	14	6	20	30.0000
7	14	7	21	33.3333
8	10	7	17	41.1765
9	14	7	21	33.3333
10	9	5	14	35.7143
-----				
TOTAL	121	65	186	34.9462



MUX LINK SIMULATOR RUN 2312 PAGE 1 OF 1. 18:42 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	13 6 19	31.5789
2	10 5 15	33.3333
3	9 4 13	30.7692
4	11 7 18	38.8889
5	13 7 20	35.0000
6	7 7 14	50.0000
7	11 6 17	35.2941
8	10 4 14	28.5714
9	11 6 17	35.2941
10	10 5 15	33.3333
TOTAL	----- 105 57 162	----- 35.1852

MUX LINK SIMULATOR RUN 2325 PAGE 1 OF 1. 18:46 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 30  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	8 6 14	42.8571
2	11 5 16	31.2500
3	6 5 11	45.4545
4	7 4 11	36.3636
5	16 5 21	23.8095
6	12 8 20	40.0000
7	14 7 21	33.3333
8	13 7 20	35.0000
9	12 6 18	33.3333
10	9 5 14	35.7143
11	10 6 16	37.5000
12	9 7 16	43.7500
13	17 4 21	19.0476
14	13 6 19	31.5789
15	13 7 20	35.0000
16	11 7 18	38.8889
17	10 5 15	33.3333
18	13 6 19	31.5789
19	11 7 18	38.8889
20	13 4 17	23.5294
21	9 6 15	40.0000
22	10 5 15	33.3333
23	11 5 16	31.2500
24	11 4 15	26.6667
25	7 5 12	41.6667
26	11 7 18	38.8889
27	13 4 17	23.5294
28	15 5 20	25.0000
29	12 8 20	40.0000
30	10 5 15	33.3333
TOTAL	337 171 508	33.6614

MUX LINK SIMULATOR RUN 2328 PAGE 1 OF 4. 18:51 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	2 5 7	71.4286
2	3 9 12	75.0000
3	3 9 12	75.0000
4	1 9 10	90.0000
5	1 7 8	87.5000
6	2 13 15	86.6667
7	3 10 13	76.9231
8	1 4 5	80.0000
9	3 9 12	75.0000
10	2 13 15	86.6667
11	1 10 11	90.9091
12	0 13 13	100.0000
13	1 8 9	88.8889
14	4 8 12	66.6667
15	1 7 8	87.5000
16	2 14 16	87.5000
17	1 11 12	91.6667
18	4 7 11	63.6364
19	2 9 11	81.8182
20	2 7 9	77.7778
21	3 7 10	70.0000
22	2 9 11	81.8182
23	0 10 10	100.0000
24	1 9 10	90.0000
25	3 9 12	75.0000
26	4 13 17	76.4706
27	0 7 7	100.0000
28	5 11 16	68.7500
29	1 10 11	90.9091
30	4 10 14	71.4286

MUX LINK SIMULATOR RUN 2328 PAGE 2 OF 4. 18:51 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	2	11	13	84.6154
32	4	12	16	75.0000
33	1	10	11	90.9091
34	4	12	16	75.0000
35	1	10	11	90.9091
36	6	13	19	68.4211
37	1	12	13	92.3077
38	0	10	10	100.0000
39	3	9	12	75.0000
40	4	12	16	75.0000
41	0	8	8	100.0000
42	1	11	12	91.6667
43	1	9	10	90.0000
44	3	13	16	81.2500
45	0	8	8	100.0000
46	4	12	16	75.0000
47	1	9	10	90.0000
48	2	11	13	84.6154
49	1	13	14	92.8571
50	3	12	15	80.0000
51	4	11	15	73.3333
52	0	12	12	100.0000
53	3	11	14	78.5714
54	2	9	11	81.8182
55	1	11	12	91.6667
56	1	8	9	88.8889
57	3	8	11	72.7273
58	2	11	13	84.6154
59	3	11	14	78.5714
60	1	13	14	92.8571

RUN DATA:

NØ OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PRØB. ØF TGT.: 0.500  
 LENGTH ØF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	3	12	15	80.0000
62	4	8	12	66.6667
63	2	7	9	77.7778
64	3	12	15	80.0000
65	0	14	14	100.0000
66	0	11	11	100.0000
67	1	7	8	87.5000
68	3	8	11	72.7273
69	4	9	13	69.2308
70	1	12	13	92.3077
71	3	11	14	78.5714
72	2	10	12	83.3333
73	2	8	10	80.0000
74	4	8	12	66.6667
75	3	6	9	66.6667
76	2	13	15	86.6667
77	0	11	11	100.0000
78	1	6	7	85.7143
79	3	10	13	76.9231
80	2	11	13	84.6154
81	2	7	9	77.7778
82	1	11	12	91.6667
83	0	12	12	100.0000
84	2	4	6	66.6667
85	1	10	11	90.9091
86	0	11	11	100.0000
87	3	8	11	72.7273
88	3	14	17	82.3529
89	2	12	14	85.7143
90	3	10	13	76.9231

MUX LINK SIMULATOR RUN 2328 PAGE 4 OF 4. 18:51 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	4	12	16	75.0000
92	1	8	9	88.8889
93	2	8	10	80.0000
94	1	7	8	87.5000
95	2	9	11	81.8182
96	1	9	10	90.0000
97	1	5	6	83.3333
98	2	13	15	86.6667
99	3	9	12	75.0000
100	1	10	11	90.9091
101	4	11	15	73.3333
102	1	9	10	90.0000
103	1	12	13	92.3077
104	1	8	9	88.8889
105	0	11	11	100.0000
106	0	12	12	100.0000
107	0	9	9	100.0000
108	3	10	13	76.9231
109	1	9	10	90.0000
110	0	10	10	100.0000
111	3	9	12	75.0000
112	3	8	11	72.7273
113	1	13	14	92.8571
114	3	10	13	76.9231
115	0	15	15	100.0000
116	3	6	9	66.6667
117	3	12	15	80.0000
118	2	8	10	80.0000
119	1	11	12	91.6667
120	4	10	14	71.4286
TOTAL	236	1185	1421	83.3920

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DRIPPED TOTAL	PERCENT DRIPPED
1	2 11 13	84.6154
2	1 9 10	90.0000
3	1 9 10	90.0000
4	1 10 11	90.9091
5	1 9 10	90.0000
6	2 9 11	81.8182
7	3 12 15	80.0000
8	0 11 11	100.0000
9	4 10 14	71.4286
10	3 8 11	72.7273
11	2 9 11	81.8182
12	0 10 10	100.0000
13	1 8 9	88.8889
14	0 12 12	100.0000
15	1 8 9	88.8889
16	3 9 12	75.0000
17	1 9 10	90.0000
18	2 10 12	83.3333
19	2 12 14	85.7143
20	3 8 11	72.7273
21	1 14 15	93.3333
22	3 11 14	78.5714
23	2 12 14	85.7143
24	1 12 13	92.3077
25	2 8 10	80.0000
26	1 8 9	88.8889
27	3 12 15	80.0000
28	1 12 13	92.3077
29	1 15 16	93.7500
30	3 11 14	78.5714

MUX LINK SIMULATOR RUN 2338 PAGE 2 OF 4. 19:07 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
31	1	11	12	91.6667
32	1	8	9	88.8889
33	2	12	14	85.7143
34	0	11	11	100.0000
35	6	11	17	64.7059
36	0	12	12	100.0000
37	2	8	10	80.0000
38	4	9	13	69.2308
39	1	8	9	88.8889
40	2	10	12	83.3333
41	1	10	11	90.9091
42	0	7	7	100.0000
43	2	10	12	83.3333
44	1	9	10	90.0000
45	3	9	12	75.0000
46	2	9	11	81.8182
47	1	13	14	92.8571
48	1	9	10	90.0000
49	2	8	10	80.0000
50	1	13	14	92.8571
51	0	11	11	100.0000
52	1	8	9	88.8889
53	4	11	15	73.3333
54	2	12	14	85.7143
55	3	11	14	78.5714
56	3	10	13	76.9231
57	0	10	10	100.0000
58	2	7	9	77.7778
59	1	14	15	93.3333
60	4	10	14	71.4286



MUX LINK SIMULATOR RUN 2338 PAGE 3 OF 4. 19:07 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
61	1	10	11	90.9091
62	1	11	12	91.6667
63	5	9	14	64.2857
64	1	7	8	87.5000
65	2	6	8	75.0000
66	4	8	12	66.6667
67	0	11	11	100.0000
68	1	9	10	90.0000
69	1	12	13	92.3077
70	3	9	12	75.0000
71	3	10	13	76.9231
72	3	8	11	72.7273
73	3	7	10	70.0000
74	2	5	7	71.4286
75	2	13	15	86.6667
76	3	11	14	78.5714
77	1	11	12	91.6667
78	3	8	11	72.7273
79	2	9	11	81.8182
80	0	10	10	100.0000
81	3	7	10	70.0000
82	3	10	13	76.9231
83	1	9	10	90.0000
84	1	11	12	91.6667
85	3	6	9	66.6667
86	0	10	10	100.0000
87	0	11	11	100.0000
88	2	11	13	84.6154
89	1	8	9	88.8889
90	2	9	11	81.8182

MUX LINK SIMULATOR RUN 2338 PAGE 4 OF 4. 19:07 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 120  
 SENSOR PERIOD: 300. SEC  
 SENSOR BUFFER: 5240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
91	2	10	12	83.3333
92	2	9	11	81.8182
93	1	8	9	88.8889
94	1	10	11	90.9091
95	0	9	9	100.0000
96	4	8	12	66.6667
97	1	9	10	90.0000
98	2	9	11	81.8182
99	0	8	8	100.0000
100	4	12	16	75.0000
101	1	13	14	92.8571
102	3	9	12	75.0000
103	0	9	9	100.0000
104	3	10	13	76.9231
105	1	12	13	92.3077
106	3	11	14	78.5714
107	2	11	13	84.6154
108	2	6	8	75.0000
109	1	9	10	90.0000
110	3	10	13	76.9231
111	2	9	11	81.8182
112	3	12	15	80.0000
113	0	13	13	100.0000
114	0	7	7	100.0000
115	2	9	11	81.8182
116	2	11	13	84.6154
117	2	8	10	80.0000
118	2	8	10	80.0000
119	1	11	12	91.6667
120	3	11	14	78.5714
TOTAL	214	1176	1390	84.6043

MUX LINK SIMULATOR RUN 2341 PAGE 1 OF 1. 14:42 2-JAN-79  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 5  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 300 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	0 127 127	100.0000
2	0 115 115	100.0000
3	0 113 113	100.0000
4	0 120 120	100.0000
5	0 123 123	100.0000
-----		
TOTAL	0 598 598	100.0000

MUX LINK SIMULATOR RUN 2361 PAGE 1 OF 1. 19:23 21-DEC-78  
INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 5  
SENSOR PERIOD: 30. SEC  
SENSOR BUFFER: 10240 BITS  
TRANSMIT RATE: 2400 BPS  
BITS PER POLL: 240  
PROB. OF TGT.: 0.500  
LENGTH OF RUN: 2.00 HRS  
# REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT	DRIPPED	TOTAL	PERCENT DRIPPED
1	110	67	177	37.8531
2	111	60	171	35.0877
3	97	61	158	38.6076
4	107	68	175	38.8571
5	125	68	193	35.2332
-----				
TOTAL	550	324	874	37.0709

MUX LINK SIMULATOR RUN 2362 PAGE 1 OF 1. 19:26 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	87	84	171	49.1228
2	83	72	155	46.4516
3	85	91	176	51.7045
4	84	84	168	50.0000
5	77	85	162	52.4691
6	82	78	160	48.7500
7	76	83	159	52.2013
8	75	69	144	47.9167
9	87	77	164	46.9512
10	90	76	166	45.7831
TOTAL	826	799	1625	49.1692

MUX LINK SIMULATOR RUN 2372 PAGE 1 OF 1. 19:31 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 2400 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	83	82	165	49.6970
2	74	80	154	51.9481
3	78	94	172	54.6512
4	63	91	154	59.0909
5	68	82	150	54.6667
6	69	85	154	55.1948
7	66	89	155	57.4194
8	75	83	158	52.5316
9	67	81	148	54.7297
10	54	76	130	58.4615
-----				
TOTAL	697	843	1540	54.7403

MUX LINK SIMULATOR RUN 2382 PAGE 1 OF 1. 19:34 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA

NO OF SENSORS: 10  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES----- SENT DROPPED TOTAL	PERCENT DROPPED
1	113 76 189	40.2116
2	119 65 184	35.3261
3	102 62 164	37.8049
4	103 66 169	39.0533
5	103 71 174	40.8046
6	102 69 171	40.3509
7	100 61 161	37.8882
8	106 54 160	33.7500
9	113 71 184	38.5870
10	103 65 168	38.6905
TOTAL	----- 1064 660 1724	----- 38.2831

MUX LINK SIMULATOR RUN 2384 PAGE 1 OF 1. 19:38 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

RUN DATA:  
 NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	53	98	151	64.9007
2	61	92	153	60.1307
3	48	84	132	63.6364
4	58	92	150	61.3333
5	56	95	151	62.9139
6	64	101	165	61.2121
7	55	88	143	61.5385
8	60	98	158	62.0253
9	49	100	149	67.1141
10	43	82	125	65.6000
11	50	95	145	65.5172
12	65	94	159	59.1195
13	54	84	138	60.8696
14	70	93	163	57.0552
15	51	98	149	65.7718
16	55	106	161	65.8385
17	52	90	142	63.3803
18	61	84	145	57.9310
19	61	83	144	57.6389
20	58	96	154	62.3377
-----				
TOTAL	1124	1853	2977	62.2439



MUX LINK SIMULATOR RUN 2394 PAGE 1 OF 1. 19:43 21-DEC-78  
 INT. SENSORS, ANSWER SLOTS, EVEN INTERVAL TURNON, RANDOM DETECTION  
 POLL AT 300 BPS

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 32

RUN DATA:

NO OF SENSORS: 20  
 SENSOR PERIOD: 30. SEC  
 SENSOR BUFFER: 10240 BITS  
 TRANSMIT RATE: 4800 BPS  
 BITS PER POLL: 240  
 PROB. OF TGT.: 0.500  
 LENGTH OF RUN: 2.00 HRS  
 # REPLY SLOTS: 10

SENSOR NUMBER	-----MESSAGES-----			PERCENT DROPPED
	SENT	DROPPED	TOTAL	
1	52	81	133	60.9023
2	58	87	145	60.0000
3	62	87	149	58.3893
4	63	98	161	60.8696
5	61	88	149	59.0604
6	52	76	128	59.3750
7	59	86	145	59.3103
8	57	88	145	60.6897
9	50	91	141	64.5390
10	71	79	150	52.6667
11	54	95	149	63.7584
12	62	91	153	59.4771
13	59	91	150	60.6667
14	59	88	147	59.8639
15	59	82	141	58.1560
16	68	85	153	55.5556
17	65	97	162	59.8765
18	55	96	151	63.5762
19	62	89	151	58.9404
20	57	90	147	61.2245
TOTAL	1185	1765	2950	59.8305